DOCUMENT RESUME

ED 388 565 SO 025 392

TITLE	The Development Data Book. A Guide to Social and Economic Statistics with a Comprehensive Data Table [and] Teaching Guides. Third Edition.
INSTITUTION	World Bank, Washington, D. C.
REPORT NO	ISBN-08213-3100-0
PUB DATE	95
NOTE	81p.; For the second edition, see ED 306 178.
AVAILABLE FROM	Distribution Unit, Office of the Publisher, The World Bank, 1818 H Street, N.W., Washington, DC 20433.
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052) -- Statistical Data (110)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Community Development; *Developing Nations; *Development; Economic Change; *Economic Climate; *Economic Development; Economic Status; *International Programs; Labor Force Development; Secondary Education; Sustainable Development

ABSTRACT

"The Development Data Book," published by the World Bank presents statistics on countries with populations of more than one million. The statistics relate to economic development and the changes it is bringing about in the world. Sometimes called indicators, the statistics are measures of social and economic conditions in developing and industrial countries. The teaching guide which accompanies the data book present activities designed for world geography, world history, economics, international studies, or current affairs. Worksheets and maps accompany the activities. The goals of this teaching guide are to: (1) increase students' knowledge and understanding of economic development and of social and economic conditions in developing countries; and (2) strengthen students' ability to perform statistical calculations, make and interpret maps and other statistical data, analyze and synthesize information, make inferences and generalizations, and think critically in solving problems and making decisions. The volume includes: (1) "Introduction" presenting goals and objectives of the guide; (2) "Beginning Activities"; (3) "Life Expectancy"; (4) "Primary School Enrollment Rate"; (5) "Population Growth Rate"; (6) "GNP (Gross National Product) per Capita"; (7) "Merchandise Exports"; (8) "Culminating Activities"; (9) "Test"; (10) "Outline Maps"; and (11) "Comparative Data Table." (EH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

The Development Data Book

ED 388 565

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

S0025392

A Guide to Social and Economic Statistics

With a Comprehensive Data Table

Third Edition

The World Bank
Washington, D.C.

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

J. Feather

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Introduction

This book presents statistics on countries with populations of more than 1 million. The statistics relate to economic development and the changes it is bringing about in the world. Sometimes called *indicators*, the statistics are measures of social and economic conditions in developing and industrial countries.

Although all countries are developing in the sense that they are constantly changing and growing, *industrial countries* have higher standards of living, with access to many goods and services. *Developing countries* have lower standards of living. Sometimes called "the Third World," these countries fall into two groups: *low-income countries* and *middle-income countries*. In both groups, many people are too poor to meet their basic needs. Middle-income countries, however, have higher standards of living than low-income countries, and they participate more in the world economy.

The goal of economic development is to raise the standards of living in developing countries so that people there can live healthier, fuller lives. In the past four decades, many developing countries have made tremendous progress, but much remains to be done.

Many factors contribute to economic development, including the abundance of a country's resources, its access to other resources through trade, and the state of the global economy. Because the world economy is becoming increasingly interdependent, economic development affects all people in all countries. *The Development Data Book* is designed to promote understanding of this development process by studying statistics.

Statistics can be powerful tools, but they have limitations. They are more accurate for some countries than for others. And because it takes a long time to collect and verify some statistics, they may be out of date even before they are published. The statistics used here are the most recent ones available at the time of publication. Because the World Bank continuously updates and refines its data, some of the statistics in this book may differ from those in other World Bank documents.

Many aspects of economic development cannot be measured by statistics. Examples are the attitudes and feelings of people, their values and ideas, their social and political systems, and their history and culture. The information in this data book thus can tell only part of the story of economic development, but it is an important part.

The indicators of economic development presented in this book measure life expectancy at birth, primary school enrollment, population growth, gross national product (GNP) per capita, and merchandise exports. The Data Table at the back of the book provides statistics by country for these and other social and economic indicators.

What is the World Bank?

The World Bank, founded in 1944, is an international cooperative owned by the governments of more than 175 countries. Its goal is to reduce poverty and improve living standards by promoting sustainable growth and investments in people. To achieve this goal, the Bank lends money to its low- and middle-income member countries for development projects and provides technical assistance and policy guidance. For example, World Bank loans help countries supply people with safe drinking water; build schools and train teachers; increase agricultural productivity; manage forests and other natural resources; build and maintain roads and railways; reduce air pollution and other environmental problems; enlarge telecommunications networks; generate and distribute energy; expand health care, especially for women and children; and modernize industries. The World Bank also serves as a catalyst to stimulate investment and lending by others. World Bank loans to middle-income member countries have longer repayment periods and generally lower interest rates than commercial bank loans. World Bank loans to low-income member countries are interest free and have even longer repayment periods. The World Bank is a specialized agency of the United Nations, but is financed separately from it and functions independently with its own system of accountability to its members. The World Bank lends about $20 billion a year to developing countries.

The Development Data Book

A Guide to Social and Economic Statistics

With a Comprehensive Data Table

Third Edition

The World Bank
Washington, D.C.

LIFE EXPECTANCY

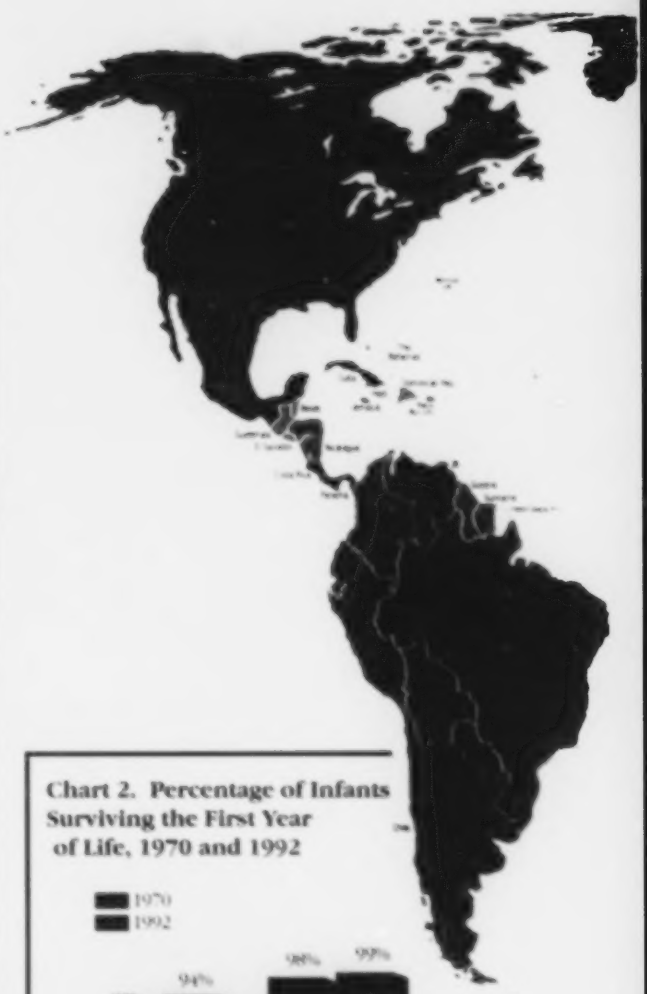
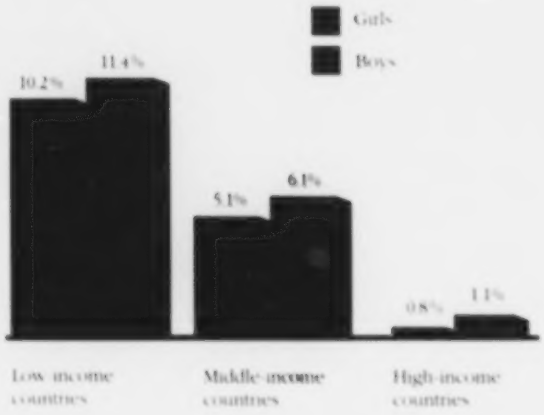


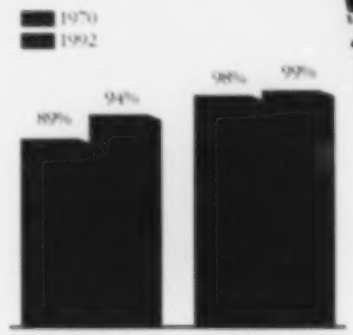
Chart 1. Percentage of Girls and Boys Dying Before Age 5, 1992



Although conditions are improving, girls and boys in developing countries are still much more likely to die before they are five years old than are those in industrial countries. Why? Drinking water is often unsafe, and unsanitary conditions are common. Pregnant women, nursing mothers, infants, and children may not get enough nutritious food. Family planning and other health and educational services may be lacking. Governments and families often cannot afford adequate health care. Flu, pneumonia, and common diarrhea cause many deaths, so do cholera and malaria. Many children are not immunized against diphtheria, measles, polio, tetanus, typhoid, tuberculosis, and whooping cough.

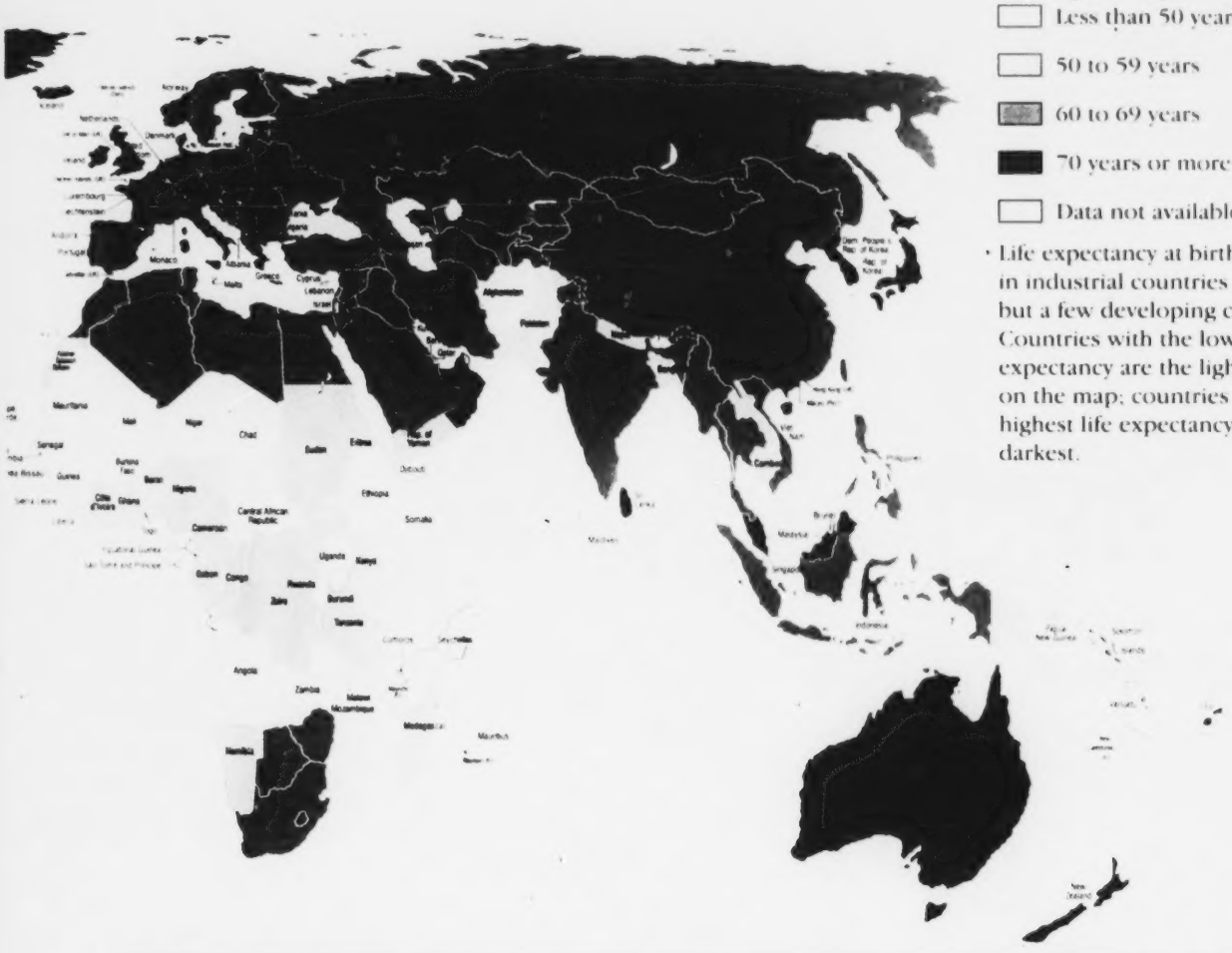
Life expectancy for people of all ages is lower in developing countries than in industrial countries. But it is much lower for infants and children.

Chart 2. Percentage of Infants Surviving the First Year of Life, 1970 and 1992



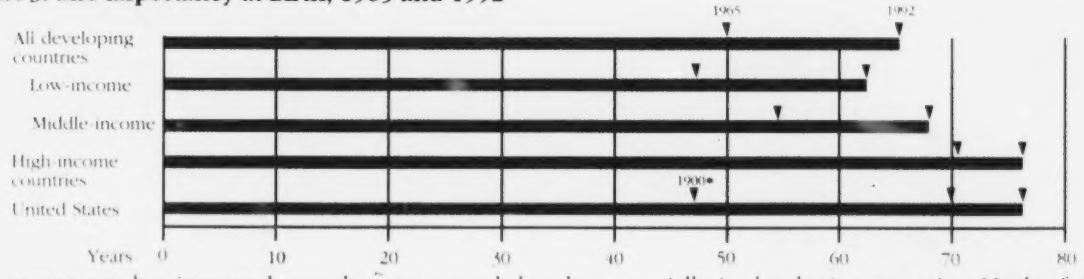
Improved living conditions over the past several decades have led to an increase in the number of infants surviving the first year of life, especially in developing countries. Nevertheless, infants and children in developing countries are still much more likely to die than are those in industrial countries. This trend strongly influences life expectancy rates because infants and children make up such a large proportion of deaths in developing countries.

Life expectancy at birth is the average number of years newborn babies can be expected to live if health conditions stay the same. It reflects the health of a country's people and the quality of care they receive when they are sick.



- Life expectancy at birth is higher in industrial countries than in all but a few developing countries. Countries with the lowest life expectancy are the lightest color on the map; countries with the highest life expectancy are the darkest.

Chart 3. Life Expectancy at Birth, 1965 and 1992



Life expectancy has increased over the past several decades, especially in developing countries. Much of this increase reflects the fact that as countries develop economically and living conditions improve, more infants survive the first year of life. Some of the most dramatic increases have occurred in the poorest countries, where more people now have safe water, nutritious food, and basic health care. This chart also shows that life expectancy in the United States in 1900 was 47 years—what it was in low-income countries in 1965.

* Source: U.S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970* (Washington, D.C., 1976).

PRIMARY SCHOOL ENROLLMENT

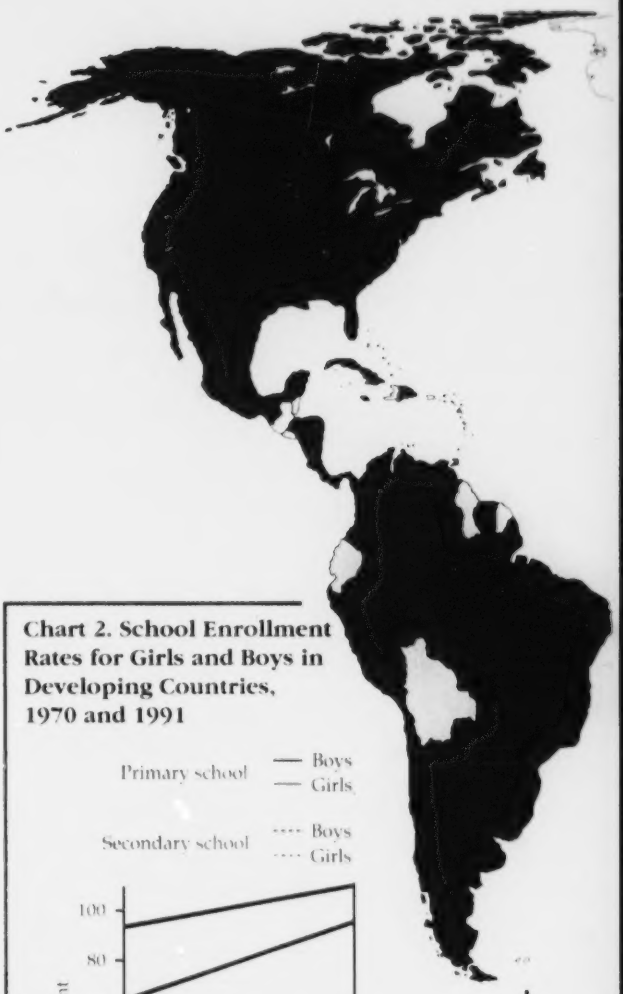
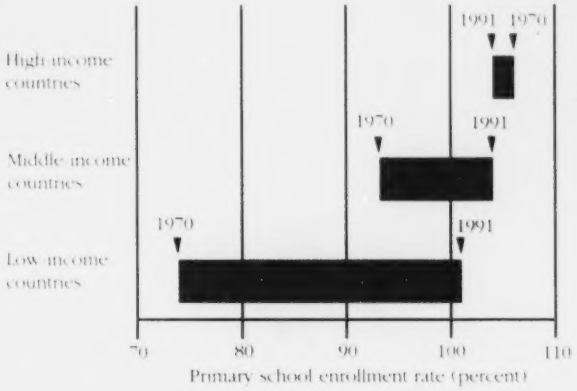


Chart 1. Primary School Enrollment Rates, 1970 and 1991



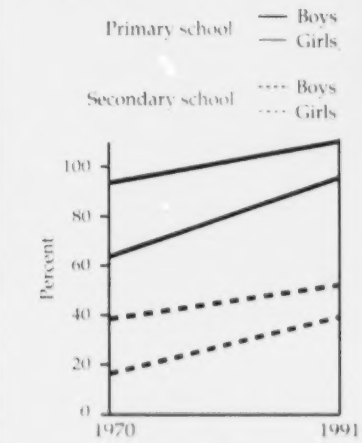
Developing countries have succeeded in sharply increasing the percentage of children who are enrolled in primary school, even with the rapid growth in the number of children of primary school age. The greatest increase has been in low-income countries.

Attending primary school helps people acquire the basic skills and knowledge they need to improve the quality of their lives and speed the economic development of their country. Studies show, for example, that primary education—especially for girls and women—leads to fewer infant deaths, smaller families, increased income, and greater productivity.

Developing countries are working hard to ensure that all children get a basic education, and the data show that much progress has been made. But enrollment rates are only one indication of a country's school system. They cannot measure the quality of education a student receives, the amount of time he or she actually spends in the classroom, or the amount of money the government spends on its educational programs.

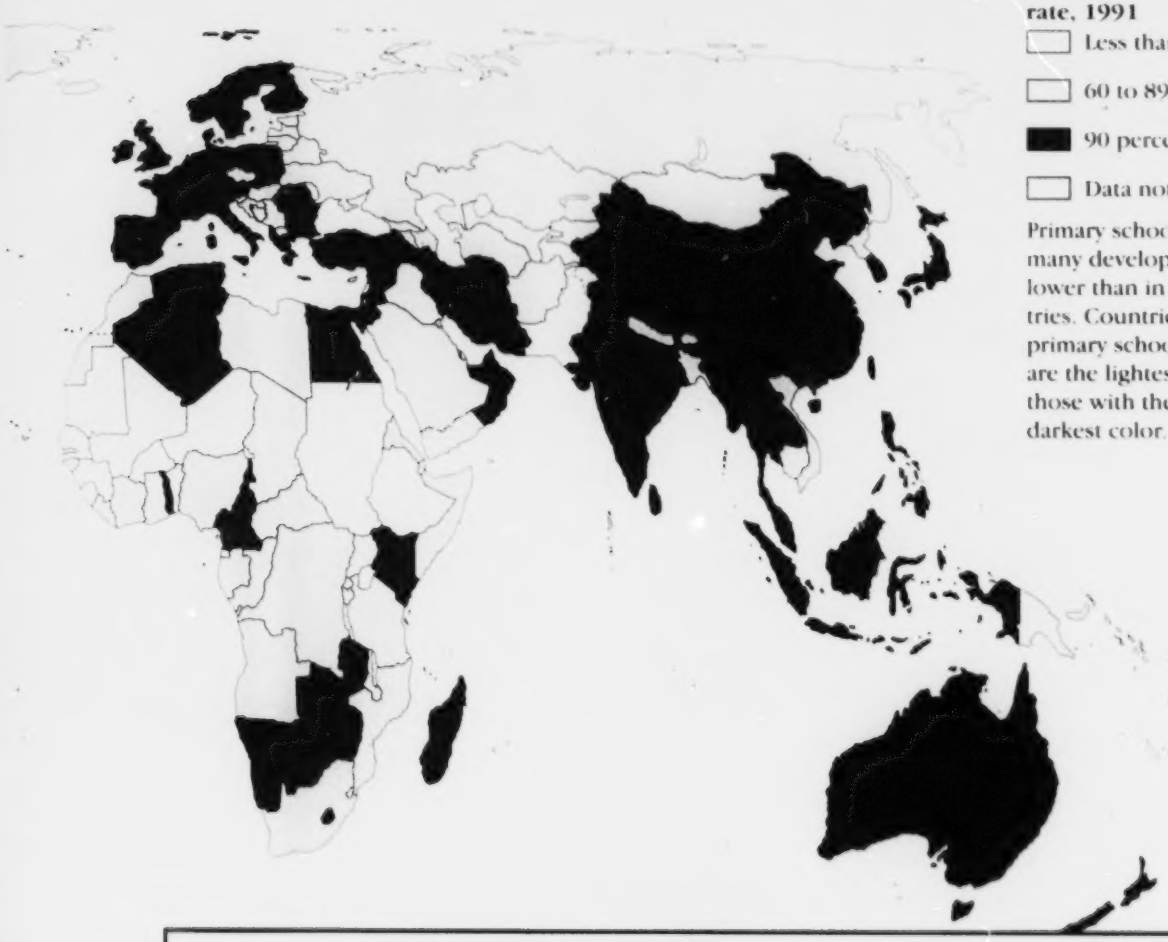
Note: Enrollment rates can be greater than 100 percent if some students are either older or younger than the normal age limit, which for primary school in most countries is six through eleven years old.

Chart 2. School Enrollment Rates for Girls and Boys in Developing Countries, 1970 and 1991



Between 1970 and 1991, school enrollment in developing countries improved overall, but it improved the most for girls in primary school. Nevertheless, boys in developing countries are still more likely than girls to be enrolled in primary or secondary school. The chart also shows that enrollment rates are much lower for secondary school than for primary school.

The primary school enrollment rate is the number of students enrolled in primary school as a percentage of the number of primary school-age children. It reflects the proportion of people in a country who have the chance to receive a basic education in reading, writing, and mathematics.

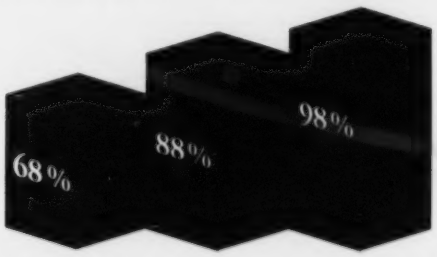


Primary school enrollment rate, 1991

- Less than 60 percent
- 60 to 89 percent
- 90 percent or more
- Data not available

Primary school enrollment in many developing countries is lower than in industrial countries. Countries with the lowest primary school enrollment rates are the lightest color on the map; those with the highest are the darkest color.

Chart 3. Persistence in Primary School, 1987



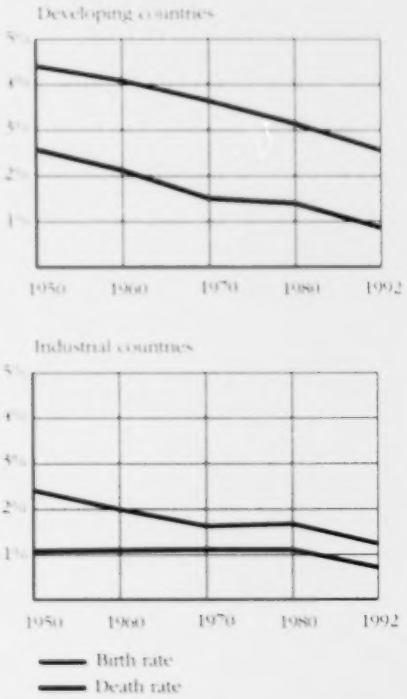
The chart shows the percentage of students who began school in the first grade and who were still in school in the fourth grade in 1987. The percentage is lower in low-income countries, where the need for education is greater. Research shows that overall in developing countries the percentage of girls who stay in school four years is smaller than the percentage of boys.

Education has improved in developing countries since the 1960s, as governments have encouraged enrollment and attendance, built schools, trained more teachers, and supplied more textbooks and other educational materials. Yet problems remain: educational opportunities are still not equal, particularly for girls and in rural areas; on average fewer than half the children of secondary school age are enrolled; and countries need more money to continue improving the quality of basic education.

* excludes data for China and India, which were not available

POPULATION GROWTH

Chart 1. Population Growth Rates in Developing and Industrial Countries, 1950 – 92



Death rates in developing countries began to decline with the spread of modern medicine in the 1950s and 1960s. Birth rates are declining for several reasons. Many parents are realizing that as health conditions improve, more of their children are likely to survive, so they are choosing to have fewer babies. Many parents now have better access to family planning, so they can control the number and spacing of their children. More parents are sending their daughters to school, which is important because females with a basic education tend to produce healthier children and smaller families. And more women now have opportunities to work outside the home, so they are starting their families later and having fewer children.

Population growth rates have declined in developing countries over the past several decades, but still remain high. This is because death rates have declined faster than birth rates in most countries. For population growth rates to decline faster, the gap between birth rates and death rates must narrow.

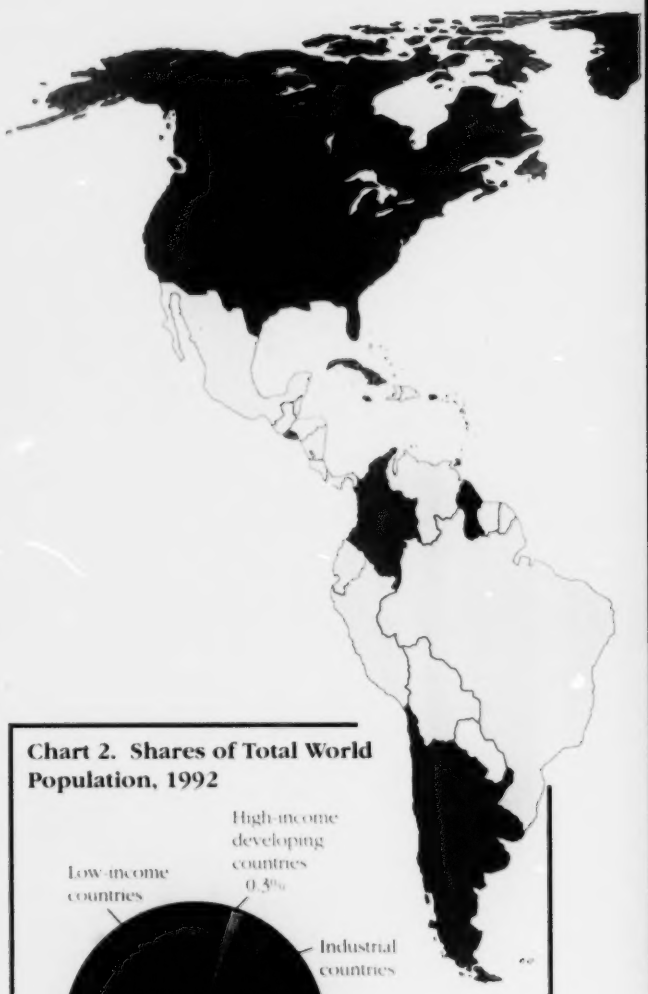
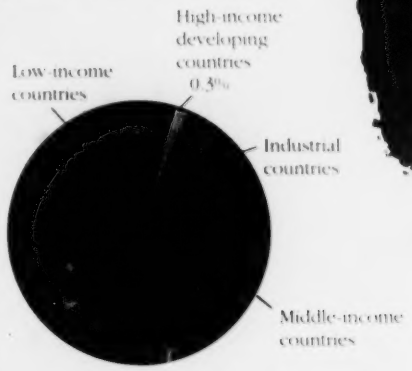
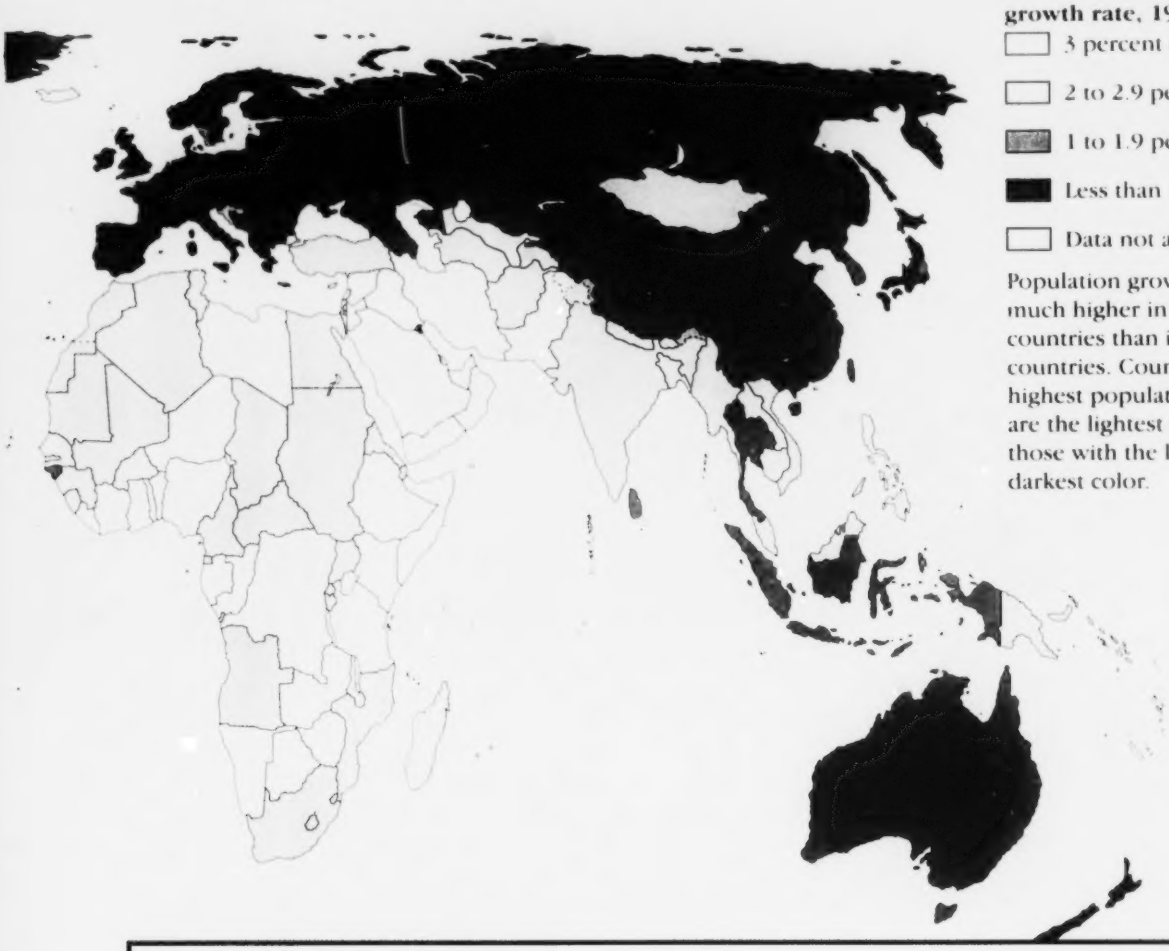


Chart 2. Shares of Total World Population, 1992



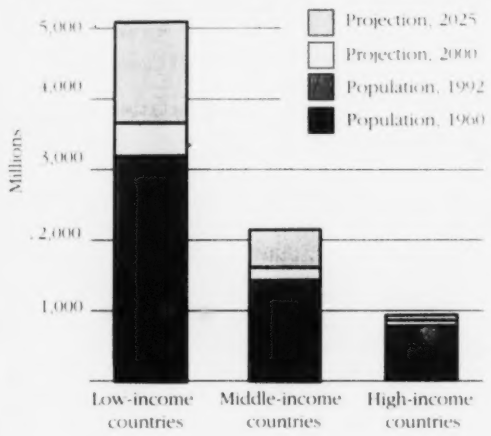
In 1992, 4 out of 5 of the world's almost 5.5 billion people lived in developing countries, with the largest number of low-income people living in Asia. In the year 2000 there will be more than half a billion more people than in 1992, and in 2025 there will be almost 3 billion more people than in 1992. Almost 9 out of 10 of these people will live in developing countries.

The population growth rate is the increase in a country's population during a period of time, usually one year, expressed as a percentage of the population at the start of that period. It reflects the number of births and deaths during the period and the number of people moving to and from a country.


Average annual population growth rate, 1980-92
3 percent or more
2 to 2.9 percent
1 to 1.9 percent
Less than 1 percent
Data not available

Population growth rates are much higher in most developing countries than in industrial countries. Countries with the highest population growth rates are the lightest color on the map; those with the lowest are the darkest color.

Chart 3. Population by Country Group, 1960–2025



For most developing countries, especially the poorest, the *number* of people added each year will be rapid to the end of the century, although the *rate* of population growth for these countries has been decreasing for several decades. (The number of people can increase each year despite a decrease in growth rate because the population base has become larger.) Rapid population growth can make it difficult to raise standards of living because the more people there are, the greater the need for food, jobs, housing, schools, energy, and health care. The pressure is greatest in urban areas, where populations are swelling as people move from the countryside in search of better jobs and living conditions.

GNP PER CAPITA

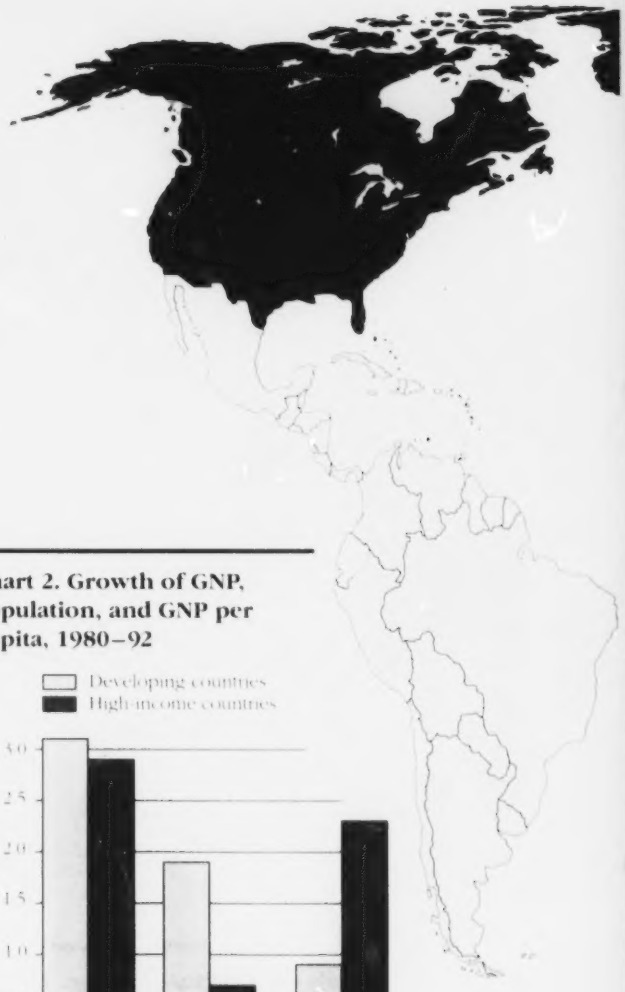


Chart 1. Population, GNP, and GNP per Capita

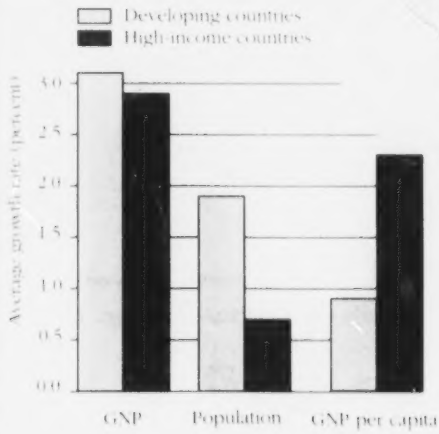
Developing countries

Industrial countries

GNP per capita is low in developing countries. They produce one-fourth as many goods and services as industrial countries but have almost six times as many people. The chart shows GNP and population for both groups of countries in 1992. It also shows GNP per capita, or the part of GNP each person would have *if* GNP were divided equally. GNP per capita helps measure the material output of a country, but it does not show what is produced, whether all people share equally in the wealth of a country or whether they lead fulfilling lives.

To increase GNP per capita, all countries are trying to produce more goods and services: that is, they are trying to make their economies grow. Economic growth depends on people—both men and women—having better health, education, and work skills. It also depends on improving transportation, communication, and energy systems, having better tools and technology, getting fair wages and prices for goods and services, encouraging savings and investment, increasing the value and variety of exports, and having better access to world markets to sell these exports. In addition, many countries are trying to slow their population growth, which can also help increase GNP per capita.

Chart 2. Growth of GNP, Population, and GNP per Capita, 1980–92



Between 1980 and 1992, GNP grew faster in developing countries than in industrial countries. This economic growth was offset, however, by rapid population growth. As an result, GNP per capita in developing countries grew at a slower rate than in industrial countries. Despite rapid population growth, some countries did better than others, especially if they were able to earn money by producing and exporting a variety of goods and services, did not have a lot of loans to repay, and had the necessary human and physical capital and the appropriate government policies.

Gross national product (GNP) per capita is the dollar value of a country's final output of goods and services in a year, divided by its population. It reflects the value of a country's economic activity and the income of its people.

GNP per Capita, 1992
Low-income country ($675 or less)
Middle-income country ($676 to $8,355)
High-income country ($8,356 or more)
Data not available
GNP per capita is much lower in most developing countries than in industrial countries. Countries with the lowest GNP per capita are the lightest color on the map; countries with the highest are the darkest color.

Chart 3. Income Distribution in Three Countries for Percentage of Households

To begin to understand what life is like in a country, it is not enough to know how much income that country generates. You must also know how equitably that income is distributed. For example, the chart shows that in India, a low-income country, the poorest 20 percent of the population earns 8.8 percent of the income, while the richest 20 percent earns almost five times more (41.3 percent). In Poland, a middle-income country, the poorest 20 percent earns 9.2 percent of the income, whereas the richest 20 percent earns almost four times more (36.1 percent). In Canada, a high-income country, the poorest 20 percent earns 5.7 percent of the income, and the richest 20 percent earns about seven times more (40.2 percent). This pattern is typical for many countries, both rich and poor.

MERCHANDISE EXPORTS

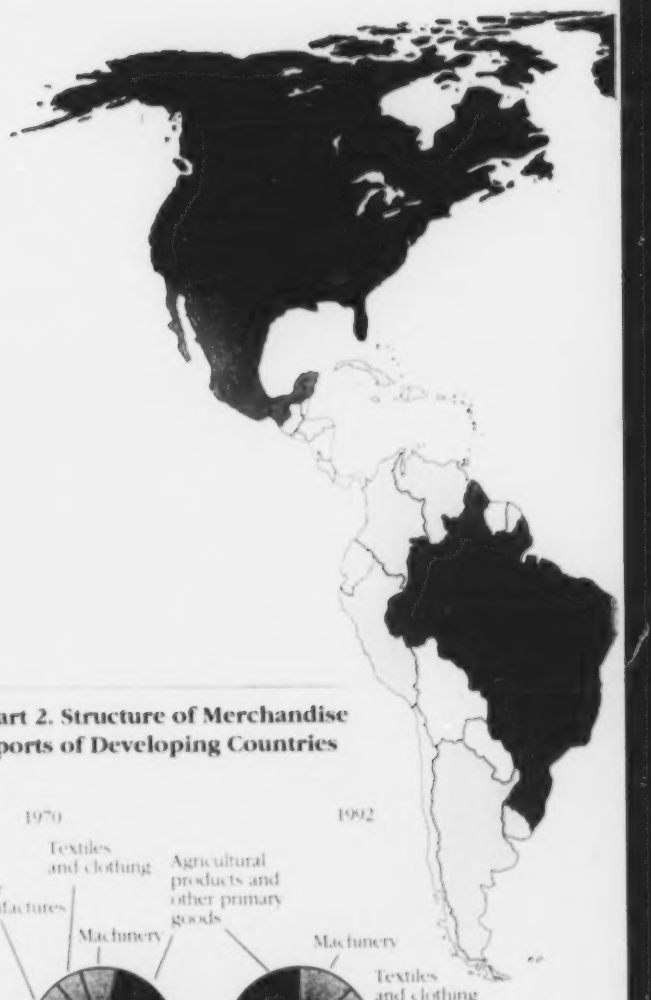
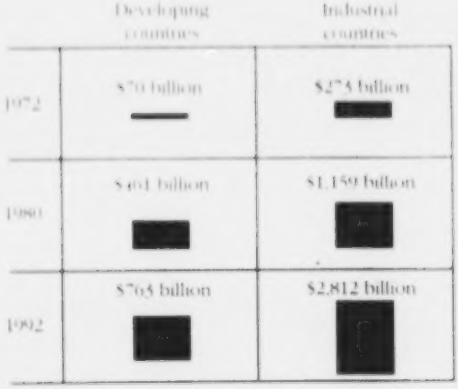


Chart 1. Value of Merchandise Exports from Developing and Industrial Countries

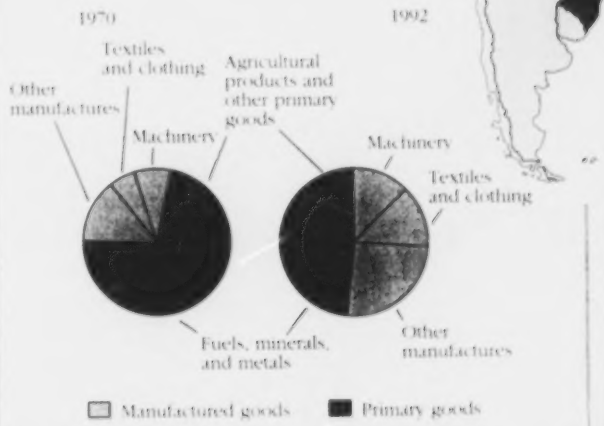


The value of the merchandise exports of almost all countries has increased over the past several decades. The chart shows this increase for developing and industrial countries in 1972, 1980, and 1992. An increase in the amount of money earned from exports can enable a country to import more of the things it needs for development, such as food, oil, machines, and help from experts.

Manufactured goods generally sell at a higher price than primary goods, but they are often more complicated and expensive to produce. Producers must decide what proportion of their exports will be primary goods or manufactured goods. Usually that decision is based on a country's comparative advantage—that is, the resources it has that other countries may lack. For example, a country may have large mineral deposits, abundant energy supplies, rich farmland, well-trained workers, or favorable laws and policies.

For many years most developing countries had a comparative advantage only in primary goods, but now many of them make and export manufactured goods, too. And at the same time many industrial countries export primary goods; the United States exports grain, for example.

Chart 2. Structure of Merchandise Exports of Developing Countries



The chart shows that manufactured goods make up more of the exports of developing countries than ever before. The increase in manufactured goods from about 28 percent to more than 50 percent of total exports indicates that some developing countries are increasingly able to make and sell manufactured goods—such as cars, electronic equipment, machinery, and textiles—competitively in the world economy.

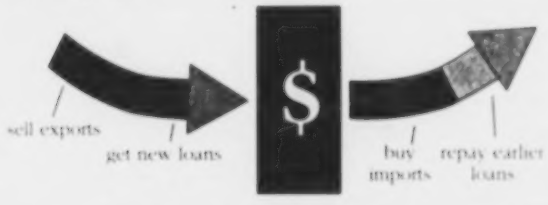
Merchandise exports are the goods a country produces and sells to other countries; they account for much of a country's exports. The money a country earns from its exports helps determine how much it can afford to spend on imports and how much it can borrow abroad.

Value of merchandise exports, 1992

- Less than $1 billion
- $1 billion to $25 billion
- $25 billion to $50 billion
- $50 billion or more
- Data not available

The value of merchandise exports from industrial countries is greater than the value of those from developing countries. Countries with the lowest value of merchandise exports are the lightest color on the map; countries with the highest value are the darkest color.

Chart 3. Flow of Money into and out of Developing Countries



The amount of money developing countries receive from exports, new loans, and other sources determines the amount they can spend on imports and use to pay back earlier loans and make other payments. Developing countries pay for imports mainly with the money they earn by selling exports (mostly to industrial countries) but also with money borrowed from commercial banks, international institutions, and industrial countries.

When world trade is brisk and prices are high, developing countries can earn money from their exports to help pay back their loans and to buy more of the goods and services they need for their economies to grow. If world trade slows and prices fall, however, they earn less from their exports but still have to pay back old loans, so their economies suffer. In addition, because the prices of primary goods tend to fall more than the prices of manufactured goods, the poorest countries—who export mostly primary goods—often suffer the most.

To increase their economic security, developing countries are trying to produce and export a wider variety of goods, including more manufactured products. This requires skilled workers, equipment and materials, energy, factories, warehouses, roads, railways, telecommunications systems, and other resources.

Data Table

			(1)		(2)		(3)		(4)	(5)		(6)		(7)	(8)
			Life expectancy at birth (years)		Infant mortality rate (per 1,000 live births)		Population per physician		Prevalence of malnutrition under age 5 (percent)	Primary school enrollment (percent)		Secondary school enrollment (percent)		Adult literacy (percent)	Population (millions)
		Region and country	1965	1992	1970	1992	1970	1990	1987–92	1970	1991	1970	1991	1990	1992
North and Central America and the Caribbean															
I	1	Canada	72	78	19	7	680	450		101	107	65	104	.	27.4
M	2	Costa Rica	64	76	62	14	1,620	1,030		110	103	28	43	7	3.2
M	3	Cuba	67	76		*11*		*38,690*			*102*		*88*	6	10.8
M	4	Dominican Republic	55	68	90	41			10.4	100		21		17	7.3
M	5	El Salvador	54	66	103	40	4,100		15.5	85	76	22	25	27	5.4
M	6	Guatemala	49	65	100	62	3,660		28.5	57	79	8	28	45	9.7
L	7	Haiti	45	55		*93*					*56*		*22*	47	6.7
L	8	Honduras	50	66	110	49	3,770	3,090	20.6	87	105	14	19	27	5.4
M	9	Jamaica	65	74	43	14	*2,630*		7.2	119	106	46	62	*2*	2.4
M	10	Mexico	59	70	72	35	1,480		13.9	104	114	22	55	13	85.0
L	11	Nicaragua	50	67	106	56	2,150	1,460		80	101	18	44		3.9
M	12	Panama	63	73	47	21	1,660	840		99	106	38	60	12	2.5
M	13	Puerto Rico	70	74	29	13				117		71			3.6
M	14	Trinidad and Tobago	65	71	52	15	2,250		5.9	106	96	42	81		1.3
I	15	United States	70	77	20	9	630	420			104		90	.	255.4
South America															
M	16	Argentina	66	71	52	29	530			105	107	44		5	33.1
M	17	Bolivia	44	60	153	82	2,020		11.4	76	85	24	34	23	7.5
M	18	Brazil	57	66	95	57	2,030		7.1	82	106	26	39	19	153.9
M	19	Chile	60	72	78	17	2,160	2,150		107	98	39	72	7	13.6
M	20	Colombia	56	69	74	21	2,260		10.1	108	111	25	55	13	33.4
M	21	Ecuador	56	67	100	45	2,910	980	16.5	97		22		14	11.0
M	22	Paraguay	65	67	57	36	2,300	1,250	3.7	109	109	17	30	10	4.5
M	23	Peru	50	65	108	52	1,920	960	10.8	107	126	31	70	15	22.4
M	24	Uruguay	68	72	46	20	910		7.4	112	108	59	84	4	3.1
M	25	Venezuela	63	70	53	33	1,120	590	5.9	94	99	33	34	8	20.2
Europe															
M	26	Albania	66	73	66	32	1,070			106	101	35	79		3.4
M	27	Armenia	66	70		21		260							3.7
I	28	Austria	69	77	26	7	540	230		104	103	72	104	.	7.9
M	29	Azerbaijan		71		32		250							7.4
M	30	Belarus		71		15		250							10.3
I	31	Belgium	71	76	21	9	650	310		103	99	81	102	.	10.0
L	32	Bosnia and Herzegovina		71		*19*									4.4
M	33	Bulgaria	70	71	27	16	540	320		101	92	79	71	.	8.5
M	34	Croatia		73		*12*									4.8
M	35	Czech Republic	68	72	21	10								.	10.3
I	36	Denmark	73	75	14	7	690	390		96	96	78	108	.	5.2
M	37	Estonia	70	70	20	13		210							1.6
I	38	Finland	69	75	13	6	960	410		82	99	102	121	.	5.0
I	39	France	71	77	18	7	750	350		117	107	74	101	.	57.4
M	40	Georgia		72		19		170							5.5
I	41	Germany	70	76	23	6	580	370			107			.	80.6
M	42	Greece	70	77	30	8	620	580		107	97	63	98	7	10.3
M	43	Hungary	69	69	36	15	510	340		97	89	63	81	.	10.3
I	44	Ireland	71	75	20	5	980	630		106	103	74	101	.	3.5
I	45	Italy	70	77	30	8	550	210		110	94	61	76	.	57.8
M	46	Kazakhstan		68		31		250							17.0
M	47	Kyrgyz Republic		66		37		280							4.5
M	48	Latvia		69	23	17		200							2.6
M	49	Lithuania		71		16		220							3.8
M	50	Macedonia, FYR		72		*29*									2.2
M	51	Moldova		68		23		250							4.4
I	52	Netherlands	73	77	13	6	800	410		102	102	75	97	.	15.2
I	53	Norway	73	77	13	6	720			89	100	83	103	.	4.3
M	54	Poland	69	70	33	14	700	490		101	98	62	83	.	38.4
M	55	Portugal	66	74	56	9	1,110	490		98	122	57	68	15	9.8
M	56	Romania	67	70	49	23	840	560		112	90	44	80	.	22.7
M	57	Russian Federation		69		20		210							149.0
M	58	Slovak Republic		71	25	13		280			100		97		5.3
M	59	Slovenia		73		8									2.0
I	60	Spain	71	77	28	8	750	280		123	109	56	106	5	39.1
I	61	Sweden	74	78	11	5	730	370		94	100	86	91	.	8.7
I	62	Switzerland	72	78	15	6	700	630			103		91	.	6.9
L	63	Tajikistan		69		49		350							5.6
M	64	Turkey	53	67	147	54	2,230	1,260		110	110	27	51	19	58.5
M	65	Turkmenistan		66		54		290							3.9
M	66	Ukraine		70		18		230							52.1
I	67	United Kingdom	71	76	19	7	810			104	104	73	86	.	57.8
M	68	Uzbekistan		69		42		290							21.5
M	69	Yugoslavia, Fed. Rep.	66	*72*		*28*					*94*		*80*		10.6
The Middle East and North Africa															
M	70	Algeria	50	67	139	55	8,100	2,330	9.2	76	95	11	60	43	26.3
L	71	Egypt, Arab Rep.	49	62	158	57	1,900	1,320	10.4	72	101	35	80	52	54.7
M	72	Iran, Islamic Rep.	52	65	131	65	3,270	3,140		72	112	27	57	46	59.6
M	73	Iraq	52	64		*56*					*84*		*48*	40	19.2
H	74	Israel	72	76	25	9	410			96	95	57	85		5.1

L Low-income economy
M Middle-income economy
I Industrial economy
H High-income developing economy
. Data not available
* Less than 5 percent

Note: Data in italics are for years other than those specified.

(9) Average annual population growth (percent) 1980–92	(10) Projected population (millions) 2025	(11) Urban population as percentage of total population 1970	1992	(12) GNP per capita (U.S. dollars) 1992	(13) Average annual growth of GNP per capita (percent) 1980–92	(14) Labor force average annual growth (percent) 1980–92	(15) Energy use per capita (kilograms of oil equivalent) 1971	1992	(16) Merchandise exports (millions of U.S. dollars) 1992	(17) Total external debt as percentage of GNP 1989	1992	Region and country	
												North and Central America and the Caribbean	
1.1	34	76	78	20,710	1.8	1.1	6,261	7,912	131,771			Canada	1
2.6	5	40	48	1,960	0.8	2.7	443	566	1,834	87	59	Costa Rica	2
1.0				m			...	*1,191*	...	...	...	Cuba	3
2.1	11	40	62	1,050	-0.5	3.3	235	347	566	56	57	Dominican Republic	4
1.6	9	39	45	1,170	0.0	3.1	160	225	396	31	26	El Salvador	5
2.9	20	36	40	980	-1.5	3.0	155	161	1,295	30	24	Guatemala	6
2.0				l	-2.4		...	*49*	*160*	...	*32*	Haiti	7
3.3	11	29	45	580	-0.3	3.8	182	175	736	87	92	Honduras	8
1.0	3	42	54	1,340	0.2	2.7	996	1,075	1,102	113	132	Jamaica	9
2.0	136	59	74	3,470	-0.2	3.1	653	1,525	27,166	45	34	Mexico	10
2.7	8	47	61	340	-5.3	3.8	248	253	228	1,099	750	Nicaragua	11
2.1	4	48	54	2,420	-1.2	2.8	820	520	500	140	107	Panama	12
0.9	4	58	75	6,590	0.9	2.1	3,874	2,018	...	...	...	Puerto Rico	13
1.3	2	63	66	3,940	-2.6	2.3	2,730	4,910	1,869	47	46	Trinidad and Tobago	14
1.0	323	74	78	23,240	1.7	1.0	7,615	7,662	420,812	...	...	United States	15
												South America	
1.3	43	78	87	6,050	-0.9	1.2	1,285	1,351	12,235	96	30	Argentina	16
2.5	14	41	52	680	-1.5	2.7	169	255	763	74	61	Bolivia	17
2.0	224	56	77	2,770	0.4	2.2	360	681	35,956	26	31	Brazil	18
1.7	19	75	85	2,730	3.7	2.2	708	837	9,646	67	49	Chile	19
1.9	49	57	71	1,330	1.4	2.6	443	670	6,916	44	37	Colombia	20
2.5	18	40	58	1,070	-0.3	3.0	199	524	3,036	119	100	Ecuador	21
3.0	10	37	49	1,380	-0.7	3.0	94	209	657	52	25	Paraguay	22
2.1	36	57	71	950	-2.8	2.8	429	330	3,573	81	93	Peru	23
0.6	4	82	90	3,340	-1.0	0.7	748	642	1,620	56	47	Uruguay	24
2.6	34	72	91	2,910	-0.8	3.2	2,094	2,296	13,997	76	61	Venezuela	25
												Europe	
1.7	5	32	36	m	...	2.7	...	*1,152*	*70*	...	...	Albania	26
1.4	5			780	*-8.2*		...	1,092	40	0	0	Armenia	27
0.4	8	52	59	22,380	2.0	0.5	2,567	3,266	44,425	...	...	Austria	28
1.5	11			740	...	...	...	...	738	...	...	Azerbaijan	29
0.5	11			2,930	...	...	...	4,154	1,061	0	1	Belarus	30
0.2	10	94	96	20,880	2.0	0.4	4,131	5,100	123,132	...	...	Belgium	31
0.2				l	...	...	...	...	...	...	...	Bosnia and Herzegovina	32
0.3	8	52	69	1,330	1.2	0.0	2,223	2,422	3,500	46	125	Bulgaria	33
0.4				m	...	...	...	...	...	...	...	Croatia	34
0.1	11			2,450	*-5.3*	...	...	3,873	...	...	...	Czech Republic	35
0.1	5	85	85	26,200	2.1	0.5	3,860	3,729	39,570	...	...	Denmark	36
0.6	2			2,760	-2.3	-0.5	...	...	242	0	11	Estonia	37
0.5	5	50	60	21,970	2.0	0.6	3,992	5,560	23,515	...	...	Finland	38
0.5	63	71	73	22,260	1.7	0.7	3,019	4,034	231,452	...	...	France	39
0.6	6			650	...	...	...	...	...	0	2	Georgia	40
0.2	75	80	86	23,030	2.4	-1.5	3,930	4,358	429,754	...	...	Germany	41
0.5	11	53	64	7,290	1.0	0.4	1,036	2,173	9,842	...	...	Greece	42
0.2	9	49	66	2,970	0.2	0.2	1,874	2,392	10,700	72	65	Hungary	43
0.4	4	52	58	12,210	3.4	1.6	2,373	2,881	28,330	...	...	Ireland	44
0.2	54	64	70	20,460	2.2	0.5	2,143	2,755	178,349	...	...	Italy	45
1.1	22	...	...	1,680	...	...	...	4,722	1,546	0	0	Kazakhstan	46
1.6	7	...	...	820	*2.3*	...	...	1,148	33	0	0	Kyrgyz Republic	47
0.3	3	...	...	1,930	0.2	-0.1	...	...	429	0	1	Latvia	48
0.7	4	...	...	1,310	-1.0	...	...	...	560	0	1	Lithuania	49
1.1	...	...	...	m	...	...	...	...	...	...	...	Macedonia, FYR	50
0.7	5	...	...	1,300	*-2.9*	...	...	1,600	185	0	1	Moldova	51
0.6	16	88	89	25,480	1.7	1.1	3,918	4,560	139,919	...	...	Netherlands	52
0.4	5	68	76	25,820	2.2	0.8	3,564	4,925	35,178	...	...	Norway	53
0.6	42	52	63	3,910	0.1	0.6	2,494	2,407	13,324	54	55	Poland	54
0.1	10	25	35	7,450	3.1	0.9	755	1,816	18,541	44	39	Portugal	55
0.2	23	42	55	1,130	-1.1	0.7	1,953	1,958	4,299	3	14	Romania	56
0.6	153	...	...	2,510	...	...	...	5,665	40,000	...	...	Russian Federation	57
0.5	6	...	...	1,930	*-7.0*	...	...	3,202	...	...	...	Slovak Republic	58
0.1	2	...	...	6,540	...	...	...	...	*6,683*	...	...	Slovenia	59
0.4	39	64	79	13,970	2.9	1.1	1,262	2,409	64,302	...	...	Spain	60
0.4	9	81	84	27,610	1.5	0.4	4,507	5,395	55,933	...	...	Sweden	61
0.7	7	56	63	36,880	1.4	0.4	2,695	3,694	65,616	...	...	Switzerland	62
2.6	11			490	...	...	...	...	...	0		Tajikistan	63
2.3	92	38	64	1,880	2.9	2.1	377	948	14,715	51	48	Turkey	64
2.5	7			1,230	...	...	...	...	1,083	...	...	Turkmenistan	65
0.3	53	...	...	1,820	...	...	...	3,885	8,100	0	0	Ukraine	66
0.2	61	89	89	17,790	2.4	0.3	3,778	3,743	190,481	...	...	United Kingdom	67
2.5	39	...	...	850	...	...	...	...	869	0	0	Uzbekistan	68
0.8	...	...	...	m	...	...	...	...	...	...	...	Yugoslavia, Fed. Rep.	69
												The Middle East and North Africa	
2.9	47	40	54	1,840	-0.5	3.7	255	988	12,055	48	60	Algeria	70
2.4	86	42	44	940	1.8	2.6	213	586	3,050	144	68	Egypt, Arab Rep.	71
3.5	126	42	58	2,200	-1.4	3.2	704	1,256	18,235	5	13	Iran, Islamic Rep.	72
3.3	...	...	...	m	...	...	...	*810*	...	...	...	Iraq	73
2.3	8	84	92	13,220	1.9	2.2	2,070	2,367	13,082	...	...	Israel	74

l Estimated to be a low-income country
m Estimated to be a middle-income country
h Estimated to be a high-income developing country
Estimated to be between 20%–39%
† Estimated to be between 40%–59%

(Data Table continues on the following page.)

Data Table *(continued)*

		Region and country	(1) Life expectancy at birth (years) 1965	1992	(2) Infant mortality rate (per 1,000 live births) 1970	1992	(3) Population per physician 1970	1990	(4) Prevalence of malnutrition under age 5 (percent) 1987–92	(5) Primary school enrollment (percent) 1970	1991	(6) Secondary school enrollment (percent) 1970	1991	(7) Adult illiteracy (percent) 1990	(8) Population (millions) 1992
The Middle East and North Africa *(continued)*															
M	75	Jordan	50	70	..	28	2,480	770	6.4	..	97	..	91	20	3.9
H	76	Kuwait	63	75	..	*14*	..	..	..	..	*55*	..	*51*	27	1.4
M	77	Lebanon	62	66	..	*34*	..	..	..	..	..	..	..	20	3.8
M	78	Libya	49	63	..	*68*	..	*4,749*	..	.	..	..	..	36	4.9
M	79	Morocco	49	63	128	57	13,090	4,840	11.8	52	66	13	28	51	26.2
M	80	Oman	43	70	119	20	8,380	1,060	..	3	100	..	57	..	1.6
M	81	Saudi Arabia	48	69	119	28	7,460	700	..	45	77	12	46	38	16.8
M	82	Syrian Arab Repubic	52	67	96	36	3,860	1,160	..	78	109	38	50	36	13.0
M	83	Tunisia	51	68	121	48	5,930	1,870	7.8	100	117	23	46	35	8.4
H	84	United Arab Emirates	57	72	87	20	1,100	1,040	..	93	115	22	69	.	1.7
L	85	Yemen, Rep.	37	53	175	106	34,790	..	30.0	22	76	3	31	62	13.0
Sub-Saharan Africa															
M	86	Angola	35	46	..	*125*	..	..	..	..	*91*	..	*12*	58	9.7
L	87	Benin	42	51	155	110	28,570	..	35.0	36	66	5	12	77	5.0
M	88	Botswana	47	68	101	35	15,220	5,150	15.0	65	119	7	54	26	1.4
L	89	Burkina Faso	38	48	178	132	97,120	57,310	45.5	13	30	1	8	82	9.5
L	90	Burundi	43	48	138	106	58,570	..	31.0	30	70	2	6	50	5.8
M	91	Cameroon	45	56	126	61	28,920	12,190	13.6	89	101	7	28	46	12.2
L	92	Central African Republic	40	47	139	105	44,020	25,890	..	64	68	4	12	62	3.2
L	93	Chad	36	47	171	122	61,900	30,030	..	35	65	2	7	70	6.0
M	94	Congo	49	51	126	114	9,940	..	23.5	..	..	..	..	43	2.4
M	95	Côte d'Ivoire	42	56	135	91	15,520	..	12.4	58	69	9	24	46	12.9
L	96	Ethiopia	42	49	158	122	86,120	32,500	..	16	25	4	12	#	54.8
M	97	Gabon	42	54	138	94	5,250	..	25.0	85	..	8	..	39	1.2
L	98	Ghana	47	56	111	81	12,910	22,970	27.1	64	77	14	38	40	15.8
L	99	Guinea	35	44	181	133	50,010	..	..	33	37	13	10	76	6.1
L	100	Guinea-Bissau	35	39	185	140	17,500	..	..	39	..	8	..	64	1.0
L	101	Kenya	48	59	102	66	8,000	10,150	18.0	58	95	9	29	31	25.7
L	102	Lesotho	48	60	134	46	30,400	..	..	87	107	7	25	#	1.9
L	103	Liberia	44	53	..	*131*	..	..	..	..	..	..	..	61	2.4
L	104	Madagascar	43	51	181	93	10,110	8,120	..	90	92	12	19	20	12.4
L	105	Malawi	39	44	193	134	76,580	45,740	..	..	66	..	4	†	9.1
L	106	Mali	38	48	204	130	44,090	19,450	25.1	22	25	5	7	68	9.0
L	107	Mauritania	37	48	165	117	17,960	..	30.0	14	55	2	14	66	2.1
M	108	Mauritius	61	70	60	18	4,190	1,180	..	94	106	30	54	..	1.1
L	109	Mozambique	37	44	156	162	18,860	..	..	47	63	5	8	67	16.5
M	110	Namibia	..	59	118	57	..	4,610	..	..	119	..	41	..	1.5
L	111	Niger	37	46	170	123	60,090	34,850	..	14	29	1	6	72	8.2
L	112	Nigeria	41	52	139	84	19,830	..	35.7	37	71	4	20	49	101.9
L	113	Rwanda	49	46	142	117	59,600	40,610	..	68	71	2	8	50	7.3
M	114	Senegal	41	49	135	68	15,810	17,650	..	41	59	10	16	62	7.8
L	115	Sierra Leone	32	43	197	143	17,830	..	..	34	48	8	16	79	4.4
L	116	Somalia	38	49	158	132	32,660	..	..	11	..	5	..	76	8.3
M	117	South Africa	51	63	79	53	..	1,750	..	99	..	18	..	..	39.8
L	118	Sudan	40	52	149	99	14,520	..	..	38	50	7	22	73	26.5
L	119	Tanzania	43	51	132	92	22,600	24,970	25.2	34	69	3	5	..	25.9
L	120	Togo	42	55	134	85	28,860	..	24.4	71	111	7	23	57	3.9
L	121	Uganda	45	43	109	122	9,210	..	23.3	38	71	4	13	52	17.5
L	122	Zaire	43	52	..	*91*	..	..	..	..	..	..	..	28	39.8
L	123	Zambia	44	48	106	107	13,640	10,920	25.1	90	92	13	..	27	8.3
L	124	Zimbabwe	48	60	96	47	6,300	7,110	10.0	74	117	7	52	33	10.4
Asia and the Pacific															
L	125	Afghanistan	35	43	..	..	..	..	..	..	..	..	..	71	21.5
I	126	Australia	71	77	18	7	830	..	..	115	107	82	82	.	17.5
L	127	Bangladesh	44	55	140	91	8,450	..	66.5	54	77	..	19	65	114.4
L	128	Bhutan	31	48	182	129	..	13,110	..	6	*65*	1	..	62	1.5
L	129	Cambodia	44	51	..	*116*	..	*985*	..	..	..	..	..	65	9.1
L	130	China	53	69	69	31	1,500	..	21.3	89	123	24	51	27	1162.2
H	131	Hong Kong	67	78	19	6	1,510	..	..	117	108	36	..	#	5.8
L	132	India	45	61	137	79	4,890	2,460	63.0	73	98	26	44	52	883.6
L	133	Indonesia	44	60	118	66	26,820	7,030	39.9	80	116	16	45	23	184.3
I	134	Japan	70	79	13	5	890	610	..	99	102	86	97	.	124.5
M	135	Korea, Dem. Rep.	57	71	..	..	..	..	..	..	..	..	..	..	22.6
M	136	Korea, Rep.	56	71	51	13	2,220	1,070	.	103	107	42	88	4	43.7
L	137	Lao PDR	40	51	146	97	15,160	4,380	..	53	98	3	22	†	4.4
M	138	Malaysia	58	71	45	14	4,310	2,590	..	87	93	34	58	22	18.6
M	139	Mongolia	56	64	102	60	580	380	..	113	89	87	77	..	2.3
L	140	Myanmar	47	60	121	72	8,820	12,900	32.4	83	102	21	20	19	43.7
L	141	Nepal	40	54	157	99	51,360	16,830	..	26	*64*	10	..	74	19.9
I	142	New Zealand	71	76	17	7	870	..	..	110	104	77	84	.	3.4
L	143	Pakistan	45	59	142	95	4,310	2,940	40.4	40	46	13	21	65	119.3
M	144	Papua New Guinea	44	56	112	54	11,640	12,870	..	52	71	8	12	48	4.1
M	145	Philippines	55	65	66	40	9,270	8,120	33.5	108	110	46	74	10	64.3
H	146	Singapore	66	75	20	5	1,370	820	..	105	108	46	70	..	2.8
L	147	Sri Lanka	64	72	53	18	5,900	..	36.6	99	108	47	74	12	17.4
M	148	Thailand	56	69	73	26	8,290	4,360	13.0	83	113	17	33	7	58.0
L	149	Viet Nam	49	67	..	*36*	..	..	..	..	*103*	..	*33*	12	69.3

L Low-income economy
M Middle-income economy
I Industrial economy
H High-income developing economy
.. Data not available
. Less than 5 percent

Note: Data in italics are for years other than those specified.

(9)	(10)	(11)		(12)	(13)	(14)	(15)		(16)	(17)		
Average annual population growth (percent) (1980–92)	Projected population (millions) 2025	Urban population as percentage of total population 1970	1992	GNP per capita (U.S. dollars) 1992	Average annual growth of GNP per capita (percent) 1980–92	Labor force average annual growth (percent) 1980–92	Energy use per capita (kilograms of oil equivalent) 1971	1992	Merchandise exports (millions of U.S. dollars) 1992	Total external debt as percentage of GNP 1989	1992	Region and country
												The Middle East and North Africa
4.9	9	51	69	1,120	-5.4	4.3	334	813	933	178	163	Jordan 75
-2.3	...	...	...	...	...	...	...	*6,414*	*6,650*	...	...	Kuwait 76
2.3	...	...	...	m	...	...	...	*714*	...	...	...	Lebanon 77
3.6	...	...	...	m	...	...	...	*3,400*	*11,352*	...	...	Libya 78
2.5	43	35	47	1,030	1.4	3.2	155	278	3,977	85	71	Morocco 79
4.3	5	5	12	6,480	4.1	3.5	132	3,070	5,555	39	27	Oman 80
4.9	43	49	78	7,510	-3.3	3.9	1,065	4,463	41,833	...	...	Saudi Arabia 81
3.3	34	44	51	m	*0.0*	3.6	418	823	3,262	102	...	Syrian Arab Republic 82
2.3	14	44	57	1,720	1.3	3.0	262	567	4,040	60	50	Tunisia 83
4.0	3	57	82	22,020	-4.3	3.6	4,325	14,631	18,058	...	...	United Arab Emirates 84
3.8	36	13	31	l	...	3.0	111	241	...	65	...	Yemen, Rep. 85
												Sub-Saharan Africa
2.9	...	...	...	m	...	...	...	*221*	*3,383*	...	...	Angola 86
3.1	11	18	40	410	-0.7	2.2	40	19	111	43	35	Benin 87
3.4	3	8	27	2,790	6.1	3.3	247	395	*1,753*	18	13	Botswana 88
2.6	24	6	17	300	1.0	2.0	9	16	142	19	20	Burkina Faso 89
2.8	14	2	6	210	1.3	2.2	8	24	72	40	43	Burundi 90
2.8	28	20	42	820	-1.5	1.9	60	77	1,657	40	60	Cameroon 91
2.6	7	30	48	410	-1.5	1.5	40	29	91	34	38	Central African Republic 92
2.4	14	12	34	220	3.4	1.9	18	16	194	21	29	Chad 93
3.1	6	33	42	1,030	-0.8	2.0	177	131	1,284	186	166	Congo 94
3.8	34	27	42	670	-4.7	2.6	152	125	6,220	139	191	Côte d'Ivoire 95
3.1	141	9	13	110	-1.9	1.9	19	21	169	37	45	Ethiopia 96
3.4	3	26	47	4,450	-3.7	0.7	810	784	2,303	77	69	Gabon 97
3.2	36	29	35	450	-0.1	2.7	106	96	942	41	39	Ghana 98
2.6	15	14	27	510	*0.8*	1.7	70	67	*517*	60	55	Guinea 99
1.9	2	15	21	220	1.6	1.3	35	37	6	180	201	Guinea-Bissau 100
3.6	47	10	25	310	0.2	3.5	116	92	1,339	55	65	Kenya 101
2.7	3	9	21	590	-0.5	2.0	...	...	*109*	19	23	Lesotho 102
3.1	...	...	...	l	...	...	...	*168*	...	...	...	Liberia 103
2.9	26	14	25	230	-2.4	2.1	55	38	296	129	117	Madagascar 104
3.2	21	6	12	210	-0.1	2.6	37	40	383	51	47	Malawi 105
2.6	24	14	25	310	-2.7	2.6	16	22	388	54	53	Mali 106
2.4	5	14	50	530	-0.8	2.8	105	108	500	155	158	Mauritania 107
1.1	1	42	41	2,700	5.6	2.7	225	385	1,336	34	30	Mauritius 108
2.6	40	6	30	60	-3.6	2.0	103	32	*139*	313	495	Mozambique 109
3.0	3	19	29	1,610	-1.0	2.4	...	...	*1,288*	...	...	Namibia 110
3.3	24	9	21	280	-4.3	2.4	17	39	271	49	51	Niger 111
3.0	217	20	37	320	-0.4	2.7	40	128	11,886	107	108	Nigeria 112
2.9	13	3	6	250	-0.6	2.8	11	28	*68*	12	26	Rwanda 113
2.9	16	33	41	780	0.1	1.9	121	111	672	51	39	Senegal 114
2.4	10	18	34	160	-1.4	1.2	133	73	164	92	158	Sierra Leone 115
3.1	21	20	25	l	...	1.7	16	7	40	153	...	Somalia 116
2.5	69	48	50	2,670	0.1	2.8	1,993	2,487	23,892	...	...	South Africa 117
2.7	57	16	23	l	...	2.9	62	69	412	...	...	Sudan 118
3.0	59	7	22	110	0.0	2.9	51	30	400	138	178	Tanzania 119
3.3	10	13	29	390	-1.8	2.3	51	46	207	61	55	Togo 120
2.6	45	8	12	170	*1.8*	2.8	58	24	164	50	59	Uganda 121
3.3	...	...	...	l	-1.8	...	...	*70*	*2,138*	...	...	Zaire 122
3.2	17	30	42	l	*-2.1*	3.3	335	158	1,100	147	...	Zambia 123
3.3	18	17	30	570	-0.9	2.8	443	450	1,235	38	64	Zimbabwe 124
												Asia and the Pacific
2.5	...	...	...	l	...	...	...	...	...	...	...	Afghanistan 125
1.4	23	85	85	17,260	1.6	1.6	4,035	5,263	38,045	...	...	Australia 126
2.3	182	8	18	220	1.8	2.9	18	59	1,903	26	29	Bangladesh 127
2.1	3	3	6	180	6.3	1.9	0	15	...	17	19	Bhutan 128
2.7	...	...	...	l	...	...	...	*59*	...	...	...	Cambodia 129
1.4	1,471	18	27	470	7.6	2.0	281	600	84,940	9	13	China 130
1.2	6	90	94	15,360	5.5	2.0	856	1,946	30,251	...	...	Hong Kong 131
2.1	1,370	20	26	310	3.1	2.0	112	235	19,795	18	26	India 132
1.8	265	17	32	670	4.0	2.4	72	303	33,815	53	62	Indonesia 133
0.5	124	71	77	28,190	3.6	0.8	2,539	3,586	339,492	...	...	Japan 134
1.9	...	...	...	m	...	...	...	*2,349*	...	...	...	Korea, Dem. Rep. 135
1.1	53	41	74	6,790	8.5	2.3	507	2,569	76,394	14	14	Korea, Rep. 136
2.6	10	10	20	250	...	2.0	55	41	91	55	40	Lao PDR 137
2.5	30	27	45	2,790	3.2	2.8	435	1,445	40,705	44	35	Malaysia 138
2.7	4	45	59	m	...	2.9	632	1,082	*468*	...	...	Mongolia 139
2.1	73	23	25	l	...	1.9	56	42	539	14	10	Myanmar 140
2.6	38	4	12	170	2.0	2.3	6	20	369	22	29	Nepal 141
0.8	4	81	84	12,300	0.6	1.5	2,448	4,284	9,338	...	...	New Zealand 142
3.1	243	25	33	420	3.1	2.9	111	223	7,264	31	37	Pakistan 143
2.3	7	10	...	950	0.0	1.5	136	235	1,076	64	87	Papua New Guinea 144
2.4	115	33	44	770	-1.0	2.5	221	302	9,790	60	57	Philippines 145
1.8	4	100	100	15,730	5.3	1.4	1,551	4,399	63,386	...	...	Singapore 146
1.4	24	22	22	540	2.6	1.6	81	101	2,487	48	41	Sri Lanka 147
1.8	81	13	23	1,840	6.0	2.2	177	614	32,473	31	35	Thailand 148
2.3	...	...	...	l	...	...	...	*100*	...	...	...	Viet Nam 149

l Estimated to be a low-income country
m Estimated to be a middle-income country
h Estimated to be a high-income developing country
Estimated to be between 20%–39%
† Estimated to be between 40%–59%

Definitions and Notes

Adult illiteracy. The proportion of the population over age fifteen who cannot, with understanding, read and write a simple statement about their everyday life and do simple mathmatical calculations.

Averages. The averages for groups of countries in this book are weighted. Weighted averages take into account differences in the size of populations of countries and thus give a more accurate picture than simple averages.

Billion. One billion equals 1,000 million.

Birth rate. The number of births in a year expressed as a percentage of the total population.

Capital. The money or wealth needed to produce goods and services. See also *human capital* and *physical capital*.

Commodity. See *primary goods or products*.

Comparative advantage. The resources a country has that other countries may lack—for example, mineral deposits, good rainfall, rich farmland, well-trained workers, or favorable government policies.

Death rate. The number of deaths in a year expressed as a percentage of the total population.

Debt. The amount of money a government owes to banks, businesses, other governments, and international institutions. The country must use its wealth to pay back these loans and thus has less money to spend on the goods and services it needs to help its economy grow. The money a government owes to foreign creditors must usually be repaid in foreign currency.

Developing country. Low- and middle-income countries in which most people have a lower standard of living with access to fewer goods and services than do people in industrial countries. There are five additional economies that are listed as high-income because of their GNP per capita but are otherwise regarded as developing. There are currently about 125 developing countries; their population is more than 4.6 billion. As a group, they are sometimes called the Third World or the South.

Domestic. Something that comes from within a country and is not imported from another country.

Economic growth. The process by which a country increases its ability to produce goods and services.

Energy use per capita. The amount of energy used during a period of time, usually one year, divided by the population. This includes energy created directly by burning fossil fuels, as well as electricity generated from nuclear power, geothermal power, hydropower, and fossil fuels, all measured in equivalent amounts of oil. The use of biomass, though substantial in some developing countries, is not counted in this measure because reliable data are not available. The term "commercial" energy refers to energy generated from sources other than biomass.

Export. To sell goods or services to a buyer outside your country.

Family planning. A health service that helps couples decide whether to have children, and, if so, when and how many.

Fertility rate. See total fertility rate.

Foreign exchange. "Hard" currency or money that is generally considered very stable and, thus, desirable to accumulate—for example, German deutschmark, Japanese yen, or U.S. dollars—and that countries use for buying and selling goods and services among themselves.

Goods and services. Things that are produced by a country's economy. Examples of goods include food, clothing, machines, and new roads. Examples of services include those of doctors, teachers, merchants, tourist agents, construction workers, and government officials.

GNP (gross national product). The dollar value of a country's final output of goods and services produced within the borders of that country in a single year plus income that residents received from abroad.

GNP per capita. The dollar value of a country's final output of goods and services in a year (its GNP) divided by its population. It reflects the value of a country's economic activity and the income of its people. Used by itself, GNP per capita cannot measure people's well-being or a country's success in development. For example, GNP is higher in colder countries, where people spend money on heating and warm clothing, than in balmy climates, where people are comfortable wearing light clothing in the open air. GNP per capita does not show what is being produced, whether all people share equally in the income of a country, or whether they lead fulfilling lives. It also does not yet deal adequately with environmental issues, particularly the value and use of natural resources. Data are compiled in the currency of each country and converted to values in U.S. dollars, taking

into account fluctuations in exchange rates and inflation, to make comparisons possible.

GNP per capita growth rate. The change in GNP per capita over a period, expressed as a percentage of GNP per capita at the start of the period. Average annual growth rates for a period of years provide a better picture of economic development in a country than does the growth rate for a single year.

High-income country. A country whose GNP per capita was $8,356 or more in 1992. There are currently 24 high-income countries, including 19 industrial countries and five countries whose GNP per capita is high but whose economies are still developing. The total population for high-income countries is about 0.8 billion, less than one-fifth of the world's population.

High-income developing country. Five economies that have high GNP per capita but that are otherwise regarded as developing.

Human capital. People and their ability to be economically productive. Education, training, and health care can help increase human capital. See also *capital* and *physical capital*.

Hygiene. Practices, such as frequent hand washing, that help ensure cleanliness and good health.

Immunization. The medical procedure of inoculating a person to increase his/her resistance to certain diseases, such as measles, smallpox, whooping cough, diphtheria, and tetanus.

Import. To buy goods and services from another country.

Industrial country. A high-income country where most people have a high standard of living with access to many goods and services. They are also known as developed countries or the North.

Infant mortality rate. The number of infants who die before reaching their first birthday.

Infrastructure. Basic systems and structures—such as roads, railways, buildings, telecommunications sytems, and energy supply systems—that a country needs for its economy to function.

Investment. Money spent now in order to make the economy grow and have more money—or goods and services—later.

Labor force, average annual growth. The increase in a country's supply of workers—both men and women—during a period of time, usually one year, expressed as a percentage of the supply of workers at the start of that period. These workers include the armed services and the unemployed but exclude homemakers and unpaid caregivers.

Life expectancy at birth. The average number of years newborn babies can be expected to live if health conditions remain the same.

Literacy. The ability to read and write a simple statement about one's everyday life and do simple mathematical calculations.

Low-income country. A country with a GNP per capita of $675 or less in 1992. The standard of living is lower in these countries; there are few goods and services, and many people cannot meet their basic needs. There are currently about 49 low-income countries with a total population of more than 3.2 billion.

Manufactured products. Goods—for example, shoes, trucks, paper, radios, electric motors, and canned fruit—that are produced from raw materials by hand or by machine.

Merchandise exports. The goods a country produces and sells to other countries; they account for most of a country's exports. Data are compiled in the currency of each country and converted to values in U.S. dollars to make comparisons possible.

Middle-income country. A country with a GNP per capita of more than $675 but less than $8,356 in 1992. The standard of living is higher than in low-income countries, and people have access to more goods and services, but many people still cannot meet their basic needs. There are currently about 76 middle-income countries with a total population of more than 1.4 billion.

Nutrition. Eating foods that promote physical growth and good health.

Physical capital. Things, such as machinery, tools, equipment, furniture, parts, and buildings, that are needed to produce goods and services. See also *capital* and *human capital*.

Population growth rate. The increase in a country's population during a period of time, usually one year, expressed as a percentage of the population at the start of that period. It reflects the number of births and deaths

during the period and the number of people moving to and from a country. The average annual population growth rates for a period of years provide a better picture than do rates for a single year. In 1992 total world population was almost 5.5 billion.

Population per physician. The population of a country divided by the number of its physicians. It does not take into account the number of nurses, medical technicians, or clinics in a country.

Prevalence of malnutrition under age 5. The percentage of children under five years of age whose health and growth are jeopardized by lack of proper food.

Primary goods or products. Goods—for example, iron ore, diamonds, wheat, copper, oil, or coffee—that are used or sold as they are found in nature. They are also called commodities.

Primary health care. Health services, including family planning, clean water supply, sanitation, immunization, and nutrition education, that are designed to be affordable for both the poor people who receive the services and the governments that provide them; the emphasis is on preventing disease as well as curing it.

Primary school enrollmen rate. The number of students enrolled in primary school as a percentage of the number of children of primary school age—usually six through eleven years of age. It reflects the proportion of people in a country who have the chance to receive a basic education in reading, writing, and mathematics. (In some countries the rate is above 100 percent, because some students enrolled in primary school are either above or below the normal age limit.) The secondary school enrollment rate is calculated in the same way, except that the age group is twelve through seventeen years.

Resources. The machines, workers, money, land, raw materials, and other things that a country can use to produce goods and services and to make its economy grow. Resources may be renewable or nonrenewable. Countries must use their resources wisely to ensure long term prosperity.

Sanitation. Maintaining clean, hygienic conditions that help prevent disease, through services such as garbage collection and wastewater disposal.

Secondary school enrollment rate. See *primary school enrollment*.

Social services. Services generally provided by the government that help improve people's standard of living; examples are public hospitals and clinics, good roads, clean water supply, garbage collection, electricity, and telecommunications.

Terms of trade. The ratio of export prices to import prices, or what a country earns from its exports relative to what it pays for its imports. For example, a country's terms of trade are *worsening* if during one year that country exports four tons of coffee to earn the foreign exchange needed to import a tractor, but the next year the country must export *five* tons of coffee to buy the same kind of tractor.

Total external debt as percentage of GNP. The amount of money a government owes to banks, businesses, and governments in other countries and to international institutions. This amount is divided by the country's GNP to see what percentage of a country's wealth must be used to repay old loans; it is therefore not available to buy the goods and services the country needs to help its economy grow. When the percentage is more than 100, a country has serious financial problems and must increase its exports or borrow more money.

Total fertility rate. The average number of children a woman will have during her lifetime. The total fertility rate in developing countries is between three and four; in industrial countries it is less than two.

Urban population as percentage of total population. The number of people in a country who live in urban areas relative to the total number of people in the country.

Value added. The value that is added to the price of goods because of the time, money, and skill used to produce them. Manufactured products have more value added than do primary products or commodities.

Wastewater. Water that has been used and is no longer clean.

Statistics for *The Development Data Book* were supplied by the World Bank's International Economics Department, which draws on an array of national and international sources in compiling social and economic data. The maps were prepared by Jeffrey Lecksell in the World Bank's Cartography Division and are based on the Eckert IV equal-area projection. Credits for the World Bank photos on the front cover are, clockwise from the top, Kay Chernusch (Kenya), Ray Witlin (India), and Ray Witlin (Indonesia), and on the back cover, clockwise from the top left, the World Bank (Egypt), the World Bank (Thailand), Kay Chernusch (Kenya), and the World Bank (Bangladesh).

The original text and charts for *The Development Data Book* were prepared by Harriet Baldwin, Bruce Ross-Larson, and Gerald Martin Quinn, and the original teaching guide was prepared by Harriet Baldwin and edited by Bruce Ross-Larson. The revised editions of *The Development Data Book* and teaching guide were prepared by Katherine Sheram and edited by Stephanie Gerard. Graphics were done by Christopher Chapman; text layout was by Cindy Stock.

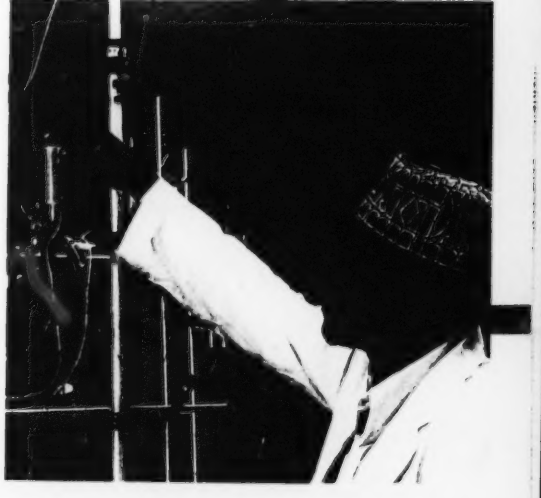
The findings, interpretations, and conclusions expressed in this study are entirely those of the authors and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent. The maps that accompany the text have been prepared solely for the convenience of readers; the designations and presentation of material in them do not imply the expression of any opinion whatsoever on the part of the World Bank, its affiliates, or its Board or member countries concerning the delimitations of boundaries or national affiliations.

Copyright © 1984, 1988, 1995 The International Bank
for Reconstruction and Development/The World Bank
1818 H Street, NW
Washington, D.C. 20433, U.S.A.
All rights reserved
Manufactured in the United States of America
January 1995

Library of Congress Cataloging-in-Publication Data

International Bank for Reconstruction and Development.
The development data book: a guide to social and economic statistics: with a comprehensive data table.
p. cm. + 1 teaching guide (52 p.)
6–12.
ISBN 0-8213-3099-3
1. Statistics. 2. Social indicators. 3. Economic indicators. 4. Quality of life—Statistics. I. Title
HA155.I56 1995
519.5—dc20 94-42716
CIP

The World Bank
Washington, D.C.



ISBN 0-8213-3099-3

The Development Data Book

Teaching Guide

A Guide to Social and Economic Statistics

With a Comprehensive Data Table

Third Edition

The World Bank
Washington, D.C.

Contents

Introduction	3
Beginning Activities	4
Life Expectancy	5
Worksheet 1	10
Primary School Enrollment Rate	11
Worksheet 2	15
Population Growth Rate	16
Worksheet 3	22
GNP per Capita	23
Worksheet 4	28
Merchandise Exports	29
Worksheet 5	37
Culminating Activities	38
Test	41
Outline Maps	
The World (without country names)	45
The World (with country names)	46
Central and South America and the Caribbean	47
Southern Europe, the Middle East, and North Africa	48
Africa	49
Asia and the Pacific	50
Comparative Data Table	51

The Development Data Book

Teaching Guide

A Guide to Social and Economic Statistics

With a Comprehensive Data Table

Third Edition

The World Bank
Washington, D.C.

26

Statistics for *The Development Data Book* were supplied by the World Bank's International Economics Department, which draws on an array of national and international sources in compiling social and economic data. The maps were prepared by Jeffrey Lecksell in the World Bank's Cartography Division and are based on the Eckert IV equal-area projection. Credits for the World Bank photos on the front cover are, clockwise from the top, Kay Chernusch (Kenya), Ray Witlin (India), and Ray Witlin (Indonesia), and on the back cover, clockwise from the top left, the World Bank (Egypt), the World Bank (Thailand), Kay Chernusch (Kenya), and the World Bank (Bangladesh).

The original text and charts for *The Development Data Book* were prepared by Harriet Baldwin, Bruce Ross-Larson, and Gerald Martin Quinn, and the original teaching guide was prepared by Harriet Baldwin and edited by Bruce Ross-Larson. The revised editions of *The Development Data Book* and teaching guide were prepared by Katherine Sheram and edited by Stephanie Gerard. Graphics were done by Christopher Chapman; text layout was by Cindy Stock.

The findings, interpretations, and conclusions expressed in this study are entirely those of the authors and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent. The maps that accompany the text have been prepared solely for the convenience of readers; the designations and presentation of material in them do not imply the expression of any opinion whatsoever on the part of the World Bank, its affiliates, or its Board or member countries concerning the delimitations of boundaries or national affiliation.

Copyright © 1984, 1988, 1995 The International Bank for Reconstruction and Development/The World Bank
1818 H Street N.W.,
Washington, D.C. 20433, U.S.A.
All rights reserved
Manufactured in the United States of America
January 1995

Introduction

This teaching guide accompanies *The Development Data Book* published by the World Bank. The learning activities it presents are designed for students who are studying world geography, world history, economics, international studies, or current affairs.

Point of view

The point of view of *The Development Data Book* and this teaching guide is as follows:

- Economic development is a means to a better life for the four-fifths of the world's people who live in developing countries.
- Greater economic strength and higher standards of living in developing countries contribute to a healthy, vigorous world economy.
- The increased interdependence among countries that accompanies economic development can benefit all countries.

Goals, objectives, and evaluation

The Development Data Book and teaching guide have two main goals:

- To increase students' knowledge and understanding of economic development and of social and economic conditions in developing countries.
- To strengthen students' ability to perform statistical calculations; to make and interpret maps, charts, and tables; to analyze and synthesize information; to make inferences and generalizations; and to think critically in solving problems and making decisions.

As a result of using *The Development Data Book* and teaching guide, students should be able to do the following:

- Contrast living conditions in developing and industrial countries.
- Associate given statistics with low-income countries, middle-income countries, and industrial countries.
- Show an understanding of the relationship among:
  - infant mortality, life expectancy, and national income level
  - school enrollment, educational level, and standard of living
  - birth rate, death rate, and population growth rate
  - production of goods and services (gross national product, or GNP), population, and GNP per capita
  - exports, imports, and borrowing
- Make inferences from statistics about living conditions and levels of economic development in a country.
- Express an opinion about living conditions in developing countries and use statistics to support it.

A test to measure the achievement of these objectives is included in this teaching guide.

Teaching *The Development Data Book*

- Begin teaching each indicator by discussing definition of the indicator, then continue with the map and afterward move to the charts. Activities in the teaching guide also follow this pattern.
- Activities in the teaching guide are not organized by increasing complexity. There are more activities in each section than most teachers will wish to use. Activities marked with an asterisk (*) are for highly motivated students and those with greater knowledge of statistics and developing countries. Information for teachers is printed in blue and does not photocopy.
- A worksheet is provided at the end of each chapter to consolidate and measure learning for that indicator.
- If possible, students should use calculators when working with the data.
- When making maps, students should ignore the small countries that are difficult to show.

For a copy of the most recent *Catalog of Educational Materials*, write to World Bank Publications Marketing Unit, 1818 H Street N.W., Washington, D.C. 20433, U.S.A.

Beginning Activities

[It is essential that students work through these activities—or similar ones designed by the teacher—before going on to those on the following pages.]

Getting an overview

Look through *The Development Data Book* to get an idea of its content and format. Study the photographs on the cover. What do they show? Read the Introduction and What is the World Bank on the inside front cover. Look at the Definitions and Notes beginning on page 16 and read the definitions of developing country, low-income country, middle-income country, high-income country, high-income developing country, and industrial country. Now discuss these questions.

1. What does "economic development" mean?
2. What does "standard of living" mean?
3. Why must people be cautious when using statistics?
4. What kinds of things can statistics tell you about a country? What kinds of things are they unable to tell you?
5. Who publishes *The Development Data Book*?
6. What would you expect the publisher's point of view to be?

Understanding how countries are grouped

1. The 149 countries in *The Development Data Book* are grouped into six geographic regions, which are listed in the Data Table on page 12 of that book. What are the six regions?

2. Look again at the Data Table. The 149 countries are also organized into four economic groups.

a. What are they? [low-income economy, middle-income economy, high-income developing economy, and industrial economy]

b. What is the difference between these groups? [See Definitions and Notes.]

c. How many countries are there in each group? [See Definitions and Notes.]

d. Which group is your own country in?

Where in the world is it?

[Teachers should give students copies of all outline maps in the back of the teaching guide.]

1. Using the blank outline map of the world, draw a line around the six geographic regions listed in the Data Table. Now locate each industrial country listed in the Data Table and shade it in with your pencil. (If you need help finding a country, look at the labeled outline map of the world.)

2. Using your regional outline maps and the Data Table, label with red pen or pencil the name of each low-income country and put "l" by it. Next label with blue pen or pencil the name of each middle-income country and put "m" by it. Now use your pencil to write "h" on the high-income developing countries. (If you need help finding a country, look at the labeled outline map of the world.)

3. Look at the maps you have made. Where do industrial countries tend to be located? [North America, Western Europe] Where do low-income countries tend to be located? [Africa, Asia] Where do middle-income countries tend to be located? [Central and South America, the Caribbean, and Asia]

Life Expectancy

(Pages 2 and 3 in *The Development Data Book*)

Life expectancy at birth is the average number of years newborn babies can be expected to live if health conditions stay the same. It reflects the health of a country's people and the quality of care they receive when they are sick.

- Life expectancy at birth is higher in industrial countries than in all but a few developing countries
- Life expectancy has gone up since 1965, with a greater increase in developing than in industrial countries.
- The percentage of infants surviving the first year of life has increased in all countries over the past several decades, with the greatest increase in the poorest countries. This increase correlates with improved water supply, sanitation, hygiene, health care, education, and nutrition, and with higher incomes.
- Infants and children still account for many more of the deaths in developing countries than in industrial countries. Children less than five years old are at particular risk.

Understanding the indicator

1. Read the definition of life expectancy at the top of page 3 in *The Development Data Book* and answer the following questions:

a. What does life expectancy at birth mean?

b. What does it tell you about a country?

c. On the basis of your own experience, what do people need to maintain health? [immunization, clean drinking water, adequate and nutritious food, and hygienic living conditions]

d. On the basis of your own experience, what do people need when they are ill? [medicine, doctors, nurses, hospitals, pharmacies, nutritious food, clean water]

e. From your answers to questions *c* and *d*, what inferences can you make about conditions in a country where life expectancy is low? [The things identified in answers *c* and *d* above are lacking.]

2. Life expectancy statistics do not tell how long a person will *actually* live but rather on average how long that person is *likely* to live. Changes in income, health conditions, and education are constantly occurring and will affect life expectancy in a country. Read the list below and decide whether each situation is likely to increase or reduce life expectancy.

a. A severe drought causes a famine. [reduce]

b. A new health clinic opens and more children are inoculated against childhood diseases. [increase]

c. Village women attend classes to learn more about good nutrition and hygiene. [increase]

d. Traveling nurses monitor the growth of infants and provide extra food to those who are not thriving. [increase]

e. Men from a low-income neighborhood lose their jobs when the factory in which they work closes. [reduce]

Interpreting the map

1. Study the world map on pages 2–3 of *The Development Data Book* and answer the following questions:

a. What color on the map represents countries with higher life expectancies? Where do these countries tend to be located?

b. What color represents countries with lower life expectancies? Where do these countries tend to be located?

c. Which continent is the lightest color? What assumptions might you make about living conditions there?

2. Look at the map again. List five countries in which life expectancy is less than 50 years, five in which it is between 50 and 69 years, and five in which it is 70 years or more. Now look at the Data Table on page 12 of *The Development Data Book* and find the economic group of each country in your list—low-income (L), middle-income (M), or industrial (I). Use this information to make a gen-

eral statement describing the relationship between life expectancy and economic development. [Life expectancy in a country tends to increase with the level of economic development.] Sometimes low-income countries have high life expectancy. How might you explain this? [The government may have decided to use a large proportion of its resources to improve health conditions and a smaller proportion for other development priorities.]

3. On the basis of GNP per capita (as shown in the Data Table), the three poorest countries in Asia in 1992 were Bangladesh, Bhutan, and Lao PDR.

a. What color are these countries on the life expectancy map? [lighter] What assumptions might you make about living conditions in these countries? [Living conditions are relatively poor; people may not have access to clean water, hygienic conditions, immunization, nutritious food, and adequate health care.]

b. List the countries in Asia in which life expectancy is 70 years or more. [Australia, Hong Kong, Japan, Korea, Dem. Rep., Korea, Rep., Malaysia, New Zealand, Singapore, Sri Lanka.] How many are developing countries? [Six.] What assumptions might you make about living conditions in these countries? [Living conditions are better; people have better access to clean water, hygienic conditions, immunization, nutritious food, and health care. Governments have used a large proportion of their resources to improve health conditions.]

Understanding chart 1

1. Study chart 1, which shows the percentage in 1992 of girls and boys dying before age five, and answer the following:

a. In industrial countries, what percentage of baby boys survive at least until age five? [98.9]

b. In low-income countries, what percentage of baby boys survive at least until age five? [88.6]

c. In which group of countries are more girls and boys likely to die? [low-income]

d. In which group of countries can more girls and boys be expected to survive? Why? [High-income; they have access to clean water, nutritious foods, and immunization and other health services.]

e. Given the data in chart 1, what conclusions can you draw about health conditions in an industrial country such as Canada and those in a developing country such as Mali? [Health conditions are much better in industrial countries.]

f. What specific steps could you take to help increase life expectancy among infants and young children? [Build clinics, carry out immunization programs, train health workers, educate parents, help ensure that mothers and their children have enough good food, and help ensure that communities have safe water and a clean place to store it.]

2.* Study chart 1 and the text around it. To understand the text better, study the following table, which shows life expectancy and total years of life at various ages for people in industrial and developing countries. "Total years of life" is a person's actual age plus how many additional years he or she can expect to live. For example, life expectancy for fifteen-year-olds in industrial countries is 62 *additional* years, or a total of 77 years. *Life expectancy tends to increase with age.* Because infants and children in developing countries are at much greater risk of dying, life expectancy at birth is much lower in those countries. In other words, if a person can survive childhood, his or her chances of surviving to old age improve dramatically.

	Life expectancy (additional years)		*Total years of life*	
	Industrial countries	*Developing countries*	*Industrial countries*	*Developing countries*
At birth	76	61	76	61
At 1 year	76	65	77	66
At 5 years	72	63	77	68
At 15 years	62	55	77	70
At 30 years	48	42	78	72
At 45 years	34	30	79	75
At 60 years	21	18	81	78

a. Calculate the difference between life expectancy and total years of life in industrial countries and developing countries at each age shown in the chart. [birth=15 years of difference; 1 year=11; 5 years=9; 15 years=7; 30 years=6; 45 years=4; 60 years=3]

b. What happens to these differences as people in both groups of countries get older? [The differences in life expectancy decrease.]

*For highly motivated students and those with greater knowledge of statistics and developing countries.

c. What does the table tell you about health conditions and their effect on people at various ages in both groups of countries? [Health conditions are worse in developing countries than in industrial countries, and they affect infants and children more than adults.]

d. If you wanted to increase life expectancy in developing countries, on what age group would you focus your efforts? [infants and children]

Understanding chart 2

1. Study chart 2, which shows the percentage of infants surviving the first year of life in developing countries in 1970 and 1992, and read the definition of infant mortality rate in the Definitions and Notes on page 17. Then do the following:

a. Complete this sentence: The percentage of infants who died during the first year of life in developing countries was about_____ percent in 1970 and about _____ percent in 1992. [11; 6]

b. What two different age groups are being studied in chart 1 and chart 2? [Chart 1 are children age 0–4 years. Chart 2 are children less than 1 year old.]

c. Refer to column 2 in the Data Table. In which countries has the infant mortality rate not gone down since 1970? [Mozambique, Uganda, Zambia] Where are these countries located? [Africa]

d. According to the Data Table, in India between 1970 and 1992 the number of infant deaths out of every 1,000 live births went from 137 to 79. What percentage decrease was this? (Subtract the 1992 number from the 1970 number, divide the result by the 1970 number, and multiply by 100 to get the percentage.) [42 percent]

2. If more newborn babies lived, what might be the effect on each of the following?

- the number of productive adults in 15 or 20 years
- the attitudes of parents about having children
- school enrollment in five or six years
- the need for jobs in 15 or 20 years
- attitudes toward family planning
- a family's educational costs
- a family's need for food
- a country's need for food.

Understanding chart 3

1. Using the data in chart 3 on life expectancy at birth in 1965 and 1992, as well as the text surrounding the chart, complete the table below as accurately as you can.

Life expectancy

	1965	*1992*	*Years added*
All countries	[58]	[66]	[8]
All developing countries	[50]	[64]	[14]
Low-income countries	[48]	[62]	[14]
Middle-income countries	[54]	[68]	[14]
Industrial countries	[71]	[77]	[6]
United States	[70]	[77]	[7]

a. What was the overall trend in life expectancy between 1965 and 1990? [It increased.]

b. Look at the data for low-income, middle-income, and high-income countries. Which group of countries had the greatest percentage increase in life expectancy? (Subtract the 1965 number from the 1992 number, divide the result by the 1965 number, and multiply by 100 to get the percentage.) [29 percent; 26 percent; 8 percent; low-income countries had the greatest percentage increase.]

c. What do the numbers suggest about living conditions in low-income and middle-income countries? [The standard of living is not as high as in high-income countries, but it is improving, especially in low-income countries.]

2. Refer to chart 3 and to column 1 in the Data Table.

a. How did life expectancy in your country change between 1965 and 1992?

b. In how many countries in 1992 was life expectancy below life expectancy in your country?

c. How was the United States in 1900 like some developing countries today? [Life expectancy was only 47.3 years.] What assumptions can you make about living conditions in the United States in 1900? [People lacked adequate health care, clean water, and sanitary facilities, and levels of education and income were much lower than today.]

3. How does a decrease in infant mortality affect life expectancy? Why? [It increases life expectancy, because child deaths are such a large proportion of all deaths.]

Using the Data Table

[The blank Comparative Data Table at the back of this teaching guide may be copied for classroom use.]

Use the Comparative Data Table to compare life expectancy in four developing countries from four different regions of the world. Save the table for later use. Follow these steps:

a. In the column at the left of the table, write the following countries and their regions:
   - Argentina (South America)
   - Burkina Faso (Sub-Saharan Africa)
   - Philippines (Asia and the Pacific)
   - Egypt (Middle East and North Africa)

b. In column 1 at the top of the table, write the heading "Life Expectancy, 1992." Read the definition of life expectancy in the Definitions and Notes.

c. Use the Data Table to find life expectancy in 1992 in each country. Rank the countries, with 1 equaling the highest life expectancy and 4 the lowest. Write the appropriate ranking number in the spaces in column 1. [Argentina: 1; Burkina Faso: 4; Egypt: 3; Philippines: 2] Make a general statement comparing the four countries.

d. Find each of the four countries on the map on pages 2–3 of *The Development Data Book*. Compare the color of each country with those of its neighbors. To what extent is each country typical of conditions in its area and region? Make a general statement comparing the four regions.

Thinking about what you have learned

1. Why do you think the increase in life expectancy between 1965 and 1992 was greater in developing countries than in industrial countries? [Conditions were so bad that when basic improvements were made—better access to clean water, nutritious foods, immunization, and primary health care—the results were dramatic.]

2. Assume that you live in a village in a developing country where life expectancy is low. You have five brothers and sisters; four other siblings have died. Your mother is pregnant.

a. What are the advantages for your parents in having many children? [Many children are needed to ensure that a few survive; many wage-earners are needed because incomes are low; children provide care in old age; large families have high status; help is needed with farming, family business, household tasks.]

b. What steps might be taken in your village so that fewer children die? [Immunize children; help families find ways to increase their income; purify the water supply; build a health care center; make more doctors and nurses available; increase the supply of nutritious food; provide health and hygiene education for children and adults.]

c. Why would it be difficult to take these steps? [The government and its people do not have a lot of money; shortage of trained people; habits are slow to change.]

3. Assume that you are the Minister of Health in a country where life expectancy at birth is 47 years. Listed below are some projects you are considering that might increase life expectancy. You can afford only five projects. Which five would you choose? Why?

a. Train health workers to immunize children in urban slums against common childhood diseases.
b. Provide classes in nutrition for pregnant and nursing mothers in villages.
c. Build low-cost health centers in rural market towns and train workers to staff them.
d. Equip a mobile health unit to work in rural areas.
e. Build another hospital in the rapidly growing capital city.
f. Improve the water supply in the two largest cities.
g. Develop a curriculum in health education for primary schools.
h. Start research on the control of diseases that are common in your country.
i. Build a new wing on an existing hospital to house modern medical instruments and equipment.

4. Do you agree or disagree with the following statement? Support your answer.

"Because life expectancy in developing countries has been rising, it will continue to rise in the future."

Supplementary activities

The blank Comparative Data Table at the back of this teaching guide may be copied for classroom use.

1. Using a Comparative Data Table, compare improvements in life expectancy and infant mortality in one industrial country and four developing countries.

a. In the column at the left of the table, write the names of these five countries: Australia, Indonesia, Malawi, Morocco, Venezuela. To which regional and economic group does each country belong?

b. Write these headings for the columns:
- Infant mortality rate, 1992
- Decrease in infant mortality rate since 1970
- Life expectancy at birth, 1992
- Increase in life expectancy since 1965

c. Read the note about infant mortality in the Definitions and Notes. Use the data in columns 1 and 2 of the Data Table to complete your table.

d. Rank the five countries for each indicator by writing a number (from 1 to 5) in the upper-right corner of each box:
- Infant mortality rate: 1=lowest, 5=highest
- Decrease in infant mortality: 1=greatest, 5=smallest
- Life expectancy: 1=longest, 5=shortest
- Increase in life expectancy: 1=greatest, 5=smallest

e. Assume for a moment that all developing countries are like those in your table and that all industrial countries are like Australia.
- In what way are developing countries ahead of industrial countries in life expectancy and infant mortality?
- In what way are industrial countries ahead of developing countries in both indicators?

2. Use a Comparative Data Table to help compare life expectancy and health conditions in your own country with those in Pakistan (a low-income country), Colombia (a middle-income country), and Canada (an industrial country).

a. In the column down the left side of the table write Pakistan, Ecuador, Canada, and the name of your country. Next to each country write the region and economic group to which it belongs.

b. In the columns across the top of the table write these indicators:
- Life expectancy, 1992
- Infant mortality, 1992
- Population per physician, 1992
- Prevalence of malnutrition under age 5 (%), 1987–1992

c. Read the notes in the Definitions and Notes that explain each indicator. Then use columns 1 through 4 in the Data Table to complete your table.

d. In a few sentences explain why the data in your table are different for developing and industrial countries. Describe what the data suggest about living conditions in these two groups of countries.

e. Save your Comparative Data Table for later use.

3.* Read in the Definitions and Notes about prevalence of malnutrition. Use a world outline map from the teaching guide and data from column 4 in the Data Table to make a map showing the prevalence of malnutrition in children under age 5, 1987–92. Your map will show the percentage of children under age 5 in each country between 1987 and 1992 who were malnourished.

a. To make your map, use the intervals below and make a key showing them:

30.0 percent or more
15.1 to 29.0 percent
5.1 to 15.0 percent
5.0 percent or less
Data not available

Mark the intervals by using colors ranging from light to dark, with the lightest for the first interval and the darkest for the fourth. Or use the following symbols: #### for the first, xxxx for the second, shanding for the third, and shading plus xxxx for the fourth.

b. Compare your map with the life expectancy map on pages 2–3 of *The Development Data Book*. What relationship, if any, do the maps suggest between life expectancy and prevalence of malnutrition?

*For highly motivated students and those with greater knowledge of statistics and developing countries.

Name _____

Date _____

Worksheet 1: Life expectancy at birth

1. Statistics on life expectancy at birth tell which of the following:
   a. how long a person will actually live, unless health conditions improve
   b. how long a person is likely to live on average, assuming health conditions remain unchanged [x]
   c. what chance a person has of surviving the first year of life.

2. A life expectancy at birth of less than 50 years is typical of:
   a. low-income countries [x]
   b. middle-income countries
   c. industrial countries.

3. The percentages of girls and boys dying before age 5 in 1992 were highest in:
   a. low-income countries [x]
   b. middle-income countries
   c. industrial countries.

4. List two reasons why children in developing countries run a greater risk of dying than children in industrial countries. [They often lack immunization, clean water, nutritious food, and health care.]

5. Infant mortality tends to be:
   a. low in countries with low life expectancy
   b. high in countries with high life expectancy
   c. high in countries with low life expectancy. [x]

6. Was life expectancy higher in industrial or developing countries in 1992? in 1965? [industrial countries in both years]

7. What has happened since 1965 to the gap in life expectancy between industrial and developing countries? [The gap has narrowed.]

8. What region of the world tends to have the most countries with low life expectancy? [Africa] with high life expectancy? [Europe]

9. What are two things a country can do to help increase the life expectancy of its people? [Ensure a constant supply of clean water; provide health care for all citizens; teach families—especially mothers and children—about hygiene and good nutrition.]

10. Thanks to improved living conditions, the percentage of infants in developing countries who now survive the first year of life is:
    a. more than 90 percent [x]
    b. more than 80 percent
    c. more than 70 percent.

Primary School Enrollment

(pages 4 and 5 in *The Development Data Book*)

The primary school enrollment rate is the number of students enrolled in primary school as a percentage of the number of primary school-age children. It shows the proportion of people in a country who have the chance to receive a basic education in reading, writing, and mathematics.

- The primary school enrollment rate is lower in many developing countries than in industrial countries.
- Between 1970 and 1991, primary school enrollment increased in most developing countries, especially in low-income countries.
- Many more children in developing countries are enrolled in primary school than in secondary school.
- Boys in developing countries are much more likely than girls to be enrolled in primary or secondary school.
- Education in developing countries helps increase people's income, standard of living, and productivity and also helps reduce infant mortality rates and slow population growth.
- Primary school students in low-income and middle-income countries are less likely to complete primary school than are students in industrial countries.

Understanding the indicator

1. Read the definition of primary school enrollment rate at the top of page 5 in *The Development Data Book* and answer the following questions:

a. What does the primary school enrollment rate measure?

b. What does it tell you about a country? [The proportion of people in a country who are receiving a basic education.]

c. What is a basic education? [Learning to read, write, and do simple mathematics.]
Do you think people need a basic education to lead better lives? Why or why not?

d. Based on the knowledge you already have, what are some reasons why children and young people in developing countries might not attend school? [Schools are often far away; children are needed to work at home, in the fields, or in the family business; families are too poor to pay school fees or buy school clothing; children are frequently ill; schooling may seem irrelevant.]

2. Using the data below, calculate the primary school enrollment rate (that is, the percentage of children enrolled in primary school) in countries A, B, and C. (Divide the number enrolled by the total population of primary school age; multiply by 100 to convert the decimal to a percentage; then round to the nearest percent.)

	Number enrolled in primary school	*Total primary school-age population*	*Primary school enrollment rate*
Country A	6,000,000	11,765,000	[51%]
Country B	11,000,000	31,429,000	[35%]
Country C	20,000,000	20,408,000	[98%]

Interpreting the map

1. Study the world map on pages 4–5 and answer the following questions:

a. What color on the map represents countries with higher primary school enrollment rates? Where do these countries tend to be located?

b. What color represents countries with lower primary school enrollment rates? Where do these countries tend to be located?

c. Which continent is the lightest color? What assumptions might you make about living conditions there?

2. Look at the map. List five countries in which the primary school enrollment rate is less than 60 percent, five in which it is between 60 percent and 89 percent, and five in which it is 90 percent or more. Now look at the Data Table on page 12 of *The Development Data Book* and find

the income group to which each country you listed belongs—low-, middle-, high-income developing, or industrial—and write it next to the country's name. Which group of countries tends to have the highest primary school enrollment rate? the lowest?

3. The average primary school enrollment rate for the world was 98 percent in 1991. Study the map and name five countries in which the rate is below the world average. To determine which of the darkest countries on the map are above the world average, refer to column 5 of the Data Table. Name five of those countries. Is your country's rate above or below the world average?

Understanding chart 1

1. Study chart 1, which shows primary school enrollment rates in high-income, middle-income, and low-income countries for 1970 and 1991, and read the text around it. Answer the following questions:

a. In which group(s) of countries did the enrollment rate for primary school increase between 1970 and 1991? [low-income and middle-income countries]

b. Did the number of children of primary school age increase or decrease in developing countries from 1970 to 1991? Why is this significant? [Increase; it shows that developing countries were able to increase the percentage of children in primary schools even though the total number of children also increased.]

2. Refer to columns 5 and 6 in the Data Table.

a. Select two industrial, two low-income, and two middle-income countries.

b. Find the 1991 primary school enrollment rates in these countries. Then find the 1991 secondary school enrollment rates.

c. Calculate the differences between the two enrollment rates in each country.

d. Make a general statement comparing the difference in the two enrollment rates in the industrial and developing countries. Based on the knowledge you already have, what do you think might explain the difference? [The difference between the primary and secondary school rates is much greater in developing than in industrial countries. Explanations might be that many students in developing countries must leave school to go to work; secondary schools may be farther away and more expensive than primary schools; there may be fewer of them; and they may seem irrelevant to daily life.]

Understanding chart 2

1. Study chart 2, which shows school enrollment rates for girls and boys in developing countries in 1970 and 1991, and do the following:

a. In developing countries who are more likely to be enrolled in primary school, girls or boys? Is the same true for secondary school? [boys; yes]

b. What happened to enrollment rates for girls and boys in primary and secondary school between 1970 and 1991? [They increased.]

c. What happened to the gaps between enrollment rates for girls and boys in primary and in secondary school between 1970 and 1991? [It narrowed for primary school but stayed about the same for secondary school.]

d. Based on knowledge you already have, why do you think more boys than girls are enrolled in primary and secondary school? [Girls are needed to work at home; if money is scarce, preference is given to boys; education for girls may seem irrelevant.]

2. Listed below are some events that might occur in a family in a developing country:

- The mother dies.
- A new baby is born.
- School fees are eliminated
- The mother attends literacy classes.
- The eldest son gets a job in a factory.
- A small factory opens and offers jobs to women.
- The spring rains fail and there is a drought.
- A school is built a mile away; previously the closest school was twenty miles away.
- The marriage contract of a young woman relative is canceled when the husband-to-be finds that his fiancee has been to primary school.
- By using more fertilizer, the family produces 20 percent more crops on its land.

a. Decide how each event would affect the parents' incentive to send a son to school. Would it increase, decrease, or have no effect on the decision?

b. Decide how each event would affect the parents' incentive to send a daughter to school. Would it increase, decrease, or have no effect on the decision?

Understanding chart 3

1. Study chart 3 on persistence in primary school in 1987. Persistence shows what percentage of students who entered first grade in 1984 had proceeded to fourth grade in 1987. Answer these questions:

a. In which group of countries was fourth-grade enrollment in 1987 the smallest share of first-grade enrollment in 1984? the largest share? [low-income; high-income]

b. Do the data in chart 3 support or refute the following statement:

"The countries that most need to increase the education level of their population are the ones whose students tend to spend the least time in school."

c. Based on the knowledge you already have, why do you think students who enroll in primary school might not finish? [The family might run out of money; the children might need to go to work; students might not be encouraged to continue in school; the schools might be far from home; the quality of the education might not be good; the schools might be crowded, which might mean not enough books for students.]

2. Assume that you are the Minister of Education in a developing country where the primary school persistence rate is 55 percent. Your goal is to improve the educational level of people in your country.

a. Here is a list of possible strategies to increase primary school persistence:

- Increase awareness among parents and children of the importance of education
- Build more schools, especially in rural areas
- Provide textbooks for each student
- Increase enrollment for girls
- Train more and better teachers.

b. Decide what percentage of your annual budget you will spend on each type of activity. All activities are important, so you must spend at least 5 percent of your budget on each one.

Using the Data Table

Use the Comparative Data Table you began in the "Using the Data Table" activity in the chapter on life expectancy.

a. In column 2 at the top of the table, write the heading "Primary school enrollment rate, 1991." Read the definition of primary school enrollment rate in Definitions and Notes.

b. Use the Data Table to find the primary school enrollment rate in 1991 for each country. Rank the countries, with 1 equaling the highest school enrollment and 4 the lowest. Write the appropriate ranking numbers in the spaces in column 2. [Philippines: 1; Argentina: 2; Egypt: 3; Burkina Faso: 4] Make a general statement comparing the four countries.

c. Find each of the four countries on the map on pages 4–5 of *The Development Data Book*. Compare the color of each country with those of its neighbors. To what extent is each country typical of conditions in its region? Make a general statement comparing the four regions.

d. Save your Comparative Data Table for later use.

Thinking about what you have learned

1. Recall your own primary school years.

a. What skills did you acquire that might help you get a job or might help your country develop economically? [Students should consider attitudes, basic learning skills, and social skills such as working with peer groups.]

b. What skills do you think a teenager might have who lives in a developing country but has not attended school? How might schooling add to or detract from those skills?

2. Assume you are in a position to increase primary school enrollment in developing countries, although your resources are limited. Consider the courses of action listed below and give reasons for following or not following them. If you choose to follow none of them, state a course of action you would follow:

a. Provide more resources to low-income countries where some progress has been made but where the need is still greatest.

b. Provide more resources to middle-income countries, where many countries have already made much progress.

c. Divide resources evenly between low-income and middle-income countries.

Supplementary activities

1.* Use a world outline map from the teaching guide and data from the Data Table to make a map showing the increase in primary school enrollment rates since 1970. Your map will show the number of percentage points the enrollment rate went up between 1970 and 1991.

a. Use the intervals below and make a key showing them:
   0–10 percentage points
   11–20 percentage points
   21–30 percentage points
   31 or more percentage points
   Mark the intervals by using colors ranging from light to dark, with the lightest for the first interval and the darkest for the fourth. Or use the following symbols: #### for the first, xxxx for the second, shading for the third, and shading-plus-xxxx for the fourth.
b. Refer to the data in columns 5 and 6 in the Data Table to make your map.
c. Study the map you have made. Then rank the groups of countries listed below by the improvement in primary school enrollment rates since 1970 (1=greatest improvement, 6=least improvement): industrial countries; Central America and the Caribbean; South America; Europe; the Middle East and North Africa; Sub-Saharan Africa; Asia and the Pacific.
d. In what way are industrial countries ahead of developing countries in primary school enrollment? In what way are developing countries ahead of industrial countries? [Most industrial countries have higher enrollment rates, but many developing countries have made more progress since 1970.]

2. Continue with the Comparative Data Table you began in supplementary activity 2 in the chapter on life expectancy.

a. In the columns across the top of the table, add these headings:
   - Primary school enrollment rate, 1991
   - Secondary school enrollment rate, 1991
b. Read in Definitions and Notes about primary and secondary school enrollment rates. Then refer to columns 5 and 6 in the Data Table to complete your table.
c. In a few sentences, explain why school enrollment rates are different in industrial and developing countries.

*For highly motivated students and those with greater knowledge of statistics and developing countries.

Name _____

Date _____

Worksheet 2: Primary school enrollment rate

1. Define primary school enrollment rate.

2. What does the primary school enrollment rate tell you about a country? [The extent to which people are receiving a basic education in reading, writing, and mathematics.]

3. What region or regions of the world tend to have more countries with low primary school enrollment rates? with high enrollment rates? [Low: Africa. High: North and South America, Europe.]

4. Between 1970 and 1991, did primary school enrollment increase more in low-income or middle-income countries? [low-income]

5. Compared with children in industrial countries, are children in developing countries more or less likely to go to primary school? [less likely]

6. Boys in developing countries are more likely than girls to:
   a. enroll in primary school but less likely to enroll in secondary school
   b. enroll in both primary and secondary school [x]
   c. enroll in secondary school but less likely to enroll in primary school.

7. Between 1970 and 1991 the gap between enrollment rates for boys and girls in primary school in developing countries:
   a. increased
   b. decreased [x]
   c. stayed about the same.

8. Studies show that when primary school enrollment increases:
   a. both infant mortality rates and income increase
   b. infant mortality rates decrease and income increases [x]
   c. both infant mortality rates and income decrease.

9. In low-income countries the percentage of students who complete primary school is:
   a. higher than in middle-income countries
   b. lower than in middle-income countries [x]
   c. the same as in middle-income countries.

10. In order to improve the quality of basic education, developing countries must:
   a. increase the number of urban schools
   b. give girls and children in rural areas more opportunity to go to school [x]
   c. encourage parents to send their sons to primary school.

Population Growth Rate

(pages 6 and 7 in *The Development Data Book*)

The population growth rate is the increase in a country's population during a period of time, usually one year, expressed as a percentage of the population at the start of that period. It reflects the number of births and deaths during the period and the number of people moving to and from a country.

- Population growth rates are much higher in most developing countries than in industrial countries.
- Population growth rates have declined in developing countries over the past few decades but remain high because birth rates have not fallen as rapidly as death rates.
- Birth rates in developing countries have begun to fall because more parents have access to family planning, health care, education, and jobs.
- Although the population growth *rate* for developing countries has been decreasing for several decades, the *absolute number* of people has been increasing—because the population *base* has become larger.
- There will be at least half a billion more people in the world in 2000 than there were in 1992 (as population grows from almost 5.5 billion to 6.1 billion), and four out of five of these people will live in developing countries.
- Population growth in developing countries between now and the end of the century will make it more difficult to raise standards of living in those countries.
- Population pressure is greatest in urban areas, where the numbers of people continue to increase rapidly.

Understanding the indicator

1. Calculate the annual population growth rate for countries A, B, and C using data provided in the table below and this formula:

Population increase in a year	+	Population at the start of the year	×	100	=	Annual population growth rate (%)

Average annual population growth rates for a period of years provide a better picture than annual rates. For this reason, they are used in the map on pages 6 and 7 and in column 8 of the Data Table on page 12 in *The Development Data Book*. Calculating any growth rate for a period longer than a year requires a more complicated mathematical formula than the one used to calculate an annual rate.

2. Population growth rates are small numbers, but they have large effects on the population of countries. To see what this means, do the following:

a. Refer to columns 8 and 9 of the Data Table. Find the population of Kenya in 1992 and the average annual population growth rate for 1980–92. [25,700,000; 3.6 percent]

b. Calculate the increase in population in Kenya by 1993, assuming that the population growth rate remained the same. Convert the percentage to a decimal and multiply; that is, 3.6 percent = 0.036 [25,700,000 × 0.036 = 925,200]

c. Calculate the increase in population by 1993 if the population growth rate were 1.1 percent. [25,700,000 × 0.011 = 282,700]

	Population at the start of the year	*Population at the end of the year*	*Population increase during the year*	*Annual population growth rate*
Country A	22,000,000	22,400,000	[400,000]	[1.8%]
Country B	8,500,000	8,800,000	[300,000]	[3.5%]
Country C	400,000,000	410,000,000	[10,000,000]	[2.5%]

3. If the population growth rate is low, population is growing slowly. If it is high, population is growing rapidly. To understand what "slow" and "rapid" mean, it helps to look at how long it will take different countries growing at different rates to double their population.

a. The number of years it takes a population to double can be estimated by dividing the number 70 by that population's growth rate. Calculate the doubling time of populations growing at the rates shown in the key to the map on pages 6 and 7. [Less than 1%, 70 years or more; 1% to 1.9%, between 70 and 35 years; 2% to 2.9%, between 35 and 23 years; 3% or more, fewer than 23 years.]

b. Is 3 percent a rapid growth rate? Explain. Is 2 percent a rapid growth rate? Explain. Is 1 percent a rapid growth rate? Explain.

c. Refer to column 9 in the Data Table. Calculate the population's doubling time for the following countries.

- Your country
- Tunisia [30]
- Chile [61]
- Zambia [22]
- Turkey [30]
- Nepal [27]

Interpreting the map

1. Study the map on pages 6–7 and refer to the map key.

a. What color on the map represents countries with lower population growth rates? Where do these countries tend to be located? [dark green; Europe]

b. What color represents countries with higher population growth rates? Where do these countries tend to be located? [yellow; Africa, Asia, the Near East, and South and Central America]

c. Which continent is the lightest color? What assumptions might you make about living conditions there? [Africa. Infant mortality rates are probably high; family planning services are probably not available; children may not have the chance to attend school; people may not get enough to eat; health conditions may be poor; living conditions are probably not as good as in countries where people earn more money and where the population is growing more slowly.]

2. Name and locate on the map five countries with population growth rates of 3 percent or more, five with rates of 2 percent to 2.9 percent, and five with rates of 1.9 percent or less.

3. In what region is the population growth rate 1 percent or less in most of the countries? Some countries in this region tend to have population growth rates of more than 1 percent. In what part of the region do these countries tend to be located? [Europe; eastern Europe]

Understanding chart 1

1. Study chart 1, which shows the population growth in developing and industrial countries during 1950–92. Then answer these questions:

a. Describe the overall trends in birth rates and death rates in developing and industrial countries. [They are declining.]

b. Why have death rates declined in developing countries since 1950? What does the phrase "modern medicine" mean? [People have better access to immunization, primary health care, and disease eradication programs.]

c. Why do you think birth rates have declined more slowly than death rates? [More children are surviving; traditions are slow to change; family planning services are not yet widely available; many girls have received little formal education; and children are still considered cheap labor and a type of social security for elderly parents.]

d. Why do you think women with a basic education tend to have fewer children? [They are more aware of family planning options; they have learned about health and hygiene, so more of their children survive; they are better qualified to work outside the home and earn their own money, so they have more options in life and may chose to start families later and have fewer children.]

[The blank Comparative Data Table at the back of this teaching guide can be copied for use with the following activity.]

2. Use the Comparative Data Table to calculate birth rates, death rates, and population growth rates for four countries in 1992.

a. In the column at the left of the table, write these country names: Argentina, Canada, China, Sierra Leone.

b. Write the following headings for the columns on the table (dates for all columns are 1992, except as noted for number 7):
   (1) Population
   (2) Births
   (3) Birth rate
   (4) Deaths
   (5) Death rate
   (6) Population growth rate
   (7) Average annual population growth rate, 1980–92

c. Refer to column 8 of the Data Table. In the first column of your table, write the population of the four countries. Convert the decimals in the Data Table into whole numbers in your table. That is, population in Canada is 27.4 million in the Data Table, so write 27,400,000 in your table.

d. Births and deaths in the four countries in 1992 were as follows (write these amounts in columns 2 and 4 of your table):

	Births	*Deaths*
Argentina	662,000	297,900
Canada	411,000	191,800
China	22,081,800	9,297,600
Sierra Leone	211,200	96,800

e. Calculate birth rates, death rates, and population growth rates using the formulas below. Enter the amounts in columns 3, 5, and 6 of your table.

Number of births ÷ Population × 100 = Birth rate (%)

Number of deaths ÷ Population × 100 = Death rate (%)

Birth rate (%) − Death rate (%) = Population growth rate (%)

[Argentina: birth rate, 2.0%; death rate, 0.9%; population growth rate, 1.1%. Canada: birth rate, 1.5%; death rate, 0.7%; population growth rate, 0.8%. China: birth rate, 1.9%; death rate, 0.8%; population growth rate, 1.1%. Sierra Leone: birth rate, 4.8%; death rate, 2.2%; population growth rate, 2.6%.]

f. Refer to the Data Table. Write the average annual population growth rate, 1980-92, in column 7 of your table. Why do the rates in columns 6 and 7 of your table differ? [Column 7 shows the average annual rate for twelve years; column 6 shows the rate for 1992.]

Understanding chart 2

1. Examine chart 2, which shows shares of total world population in 1992, and the text below the chart. Then answer the following questions:

a. How many people were there in the world in 1992? [almost 5.5 billion] What percentage of them lived in developing countries? [85%, about 4 out of 5]

b. About how many people will there be in the world in 2025? [8.2 billion] What percentage will live in developing countries? [almost 9 out of 10, therefore almost 90%]

c. What kinds of economic and social issues must individuals and governments consider as population increases?

2. Use column 8 in the Data Table to fill in columns 1 and 4 in the table below. Next calculate the answers to columns 2 and 5 and fill them in. Then answer the questions that follow.

	(1) *Population 1992*	*(2)* *% of world population 1992*	*(3)* *Avg. annual population growth rate 1980–92*	*(4)* *Population 2025*	*(5)* *% of world population 2025*
China	[1,162,200,000]	[21.4%]	1.4	[1,471,000,000]	[18.1%]
India	[883,600,000]	[16.3%]	2.1	[1,370,000,000]	[16.8%]
World	5,438,000,000	—	—	8,123,000,000	—

a. In 1992 what were the two most populous countries in the world? [China, India]

b. Compare the population size of the two countries in 1992. [China's population is about 1.3 times larger.] in 2025. [By 2025 India will have almost as many people as China.] How do you account for this change? [India's population is growing 1.5 times faster than China's.]

c. Add up the 1992 populations of China and India. What percentage of the world's population is the total? [37.8%]

d. Add the populations of China and India as projected for the year 2025. What percentage of the world's population will their total be?

e. In what ways might these two countries play an important role in the world economy?

f. Find information about the steps China is taking to reduce population growth. Write a brief description of these steps.

3. Study the table at the bottom of the page, then answer the questions that follow.

a. Based on the table, what is happening to the average annual population growth rate in developing countries over time? [It is decreasing.]

b. Based on the table, what is happening to the population in developing countries over time? [It is increasing.]

c. How do you explain these two trends? [Even though the population growth rate is decreasing, population size continues to grow because the population base has become larger. NOTE: If these trends continue, this momentum will eventually cease, and population size will begin to decrease.]

4. Do you agree or disagree with the following statement? Give reasons for your answer.

"Population growth is not a problem in developing countries because population growth rates are going down."

Understanding chart 3

1. Study chart 3, which shows the world population by country group for various years. Add up the population figures for 1992 and for 2025. What is the total world population for each year? How much will total world population have increased by 2025? [1992: 5,438,000,000; 2025: 6,114,000,000; an increase of more than half a billion]

2. Use the data in chart 3 to calculate the percentage of the world population that lived in low-income, middle-income, and high-income countries in 1992. [58.6 percent; 26.1 percent; 15.3 percent] Make the same calculations using the estimates for 2025. [59.8 percent, 26.1 percent, 14.1 percent] Compare the percentages for each country group and write a sentence that describes the change between 1992 and 2025. [The proportion of people in low-income countries increased, the proportion of people in middle-income countries stayed the same, and the proportion of people in high-income countries decreased.]

3. The table below shows population data for three developing countries. Complete the table below (divide the percentage by 100 to get a decimal, then multiply population size by the decimal figure). Then answer the questions that follow.

	Population size	*Average annual population growth rate (%)*	*Population increase*
Argentina			
1976:	25,700,000	1.6	[411,200]
1992:	33,100,000	1.3	[430,300]
Indonesia			
1976:	135,200,000	2.3	[3,109,600]
1992:	184,300,000	1.8	[3,317,400]
Kenya			
1976:	13,800,000	3.4	[469,200]
1992:	25,700,000	3.6	[925,200]

a. Look at the numbers for Argentina. Although the population growth rate decreased from 1976 to 1992, the population increase was greater in 1992. Why? [The population base was larger in 1992.]

b. What is the population situation in Kenya? [Both the population growth rate and population size have increased.]

c. Look at the numbers for Indonesia. What has happened to the population growth rate and the population size? Why? [Like Argentina, the rate has declined, but the amount of increase was larger in 1992 because the population base was larger.]

	Average annual population growth rate			*Population (millions)*		
	1970–80	*1980–92*	*1992–2000*	*1975*	*1986*	*1992*
Developing countries	2.5%	1.9%	1.6%	3,016	3,762	4,610

4.* Make a bar graph showing world population in 1992 and estimates of world population in 2025 for the six regions of the world shown in the Data Table.

a. On the vertical axis of the graph, write the regions, leaving enough space between them for two horizontal bars (one for 1992 data and one for 2025 data).
b. On the horizontal axis of the graph, mark off spaces for 0, 0.5 billion, 1.0 billion, and so forth, up to 6.5 billion.
c. Make a key for the graph to show different colors or line patterns for 1992 data and 2025 data.
d. Refer to columns 8 and 10 in the Data Table; make a table showing the total population of each region in 1992 and in 2025. Round to the nearest million, then move the decimal three places to the left to express your answer in billions. Plot the data on the bar graph.
e. Write a sentence summarizing the information on the graph.

5. Answer these questions:

a. What problems can rapid population growth cause? [overcrowded cities; shortage of food, energy, and other resources; lack of adequate jobs, housing, health care, and other services]
b. What can countries do to slow population growth? [increase education, especially for girls; offer better family planning services to more people; provide medical insurance, pension plans, and social security; improve health care and decrease infant mortality; increase people's awareness of problems of over population]
c. Why might a country not want to slow population growth? [for religious reasons; to increase its political influence; because it has a large land area]

Using the Data Table

1. Use the Comparative Data Table you developed in the "Using the Data Table" sections of the chapters on life expectancy and primary school enrollment.

a. In column 3 at the top of the table, write the heading "Average Annual Population Growth Rate, 1980–92." Read the definition of population growth rate in Definitions and Notes.
b. Use the Data Table to find the average annual population growth rate for each country in your data table during 1980–92. Rank the countries, with 1 equaling the lowest population growth rate and 4 the highest. Write the appropriate ranking number in the spaces in column 3. [Argentina: 1; Egypt and Philippines: 2; Burkina Faso: 4] Make a general statement comparing the four countries.
c. Find the four countries on the map on pages 6–7 of *The Development Data Book*. Compare the color of each country with those of its neighbors. To what extent is each country typical of conditions in its area? Make a general statement comparing these four areas.
d. Your Comparative Data Table is now complete. Study your table and make a general statement comparing the four countries with their three indicators. [Countries that tend to rank high (or low) in one indicator tend to rank high (or low) in the other indicators, too.]

2. Using the Data Table, do the following:

a. List the forty developing countries with population growth rates of 1.9 percent or less for 1980–92. [Albania, Argentina, Armenia, Azerbaijan, Belarus, Bulgaria, Chile, China, Colombia, Cuba, Czech Republic, El Salvador, Estonia, Georgia, Greece, Guinea-Bissau, Hong Kong, Hungary, Indonesia, Jamaica, Kazakhstan, Korea (Republic of), Krygyz Republic, Latvia, Lithuania, Moldova, Mauritius, Poland, Portugal, Puerto Rico, Romania, Russian Federation, Singapore, Slovak Republic, Slovenia, Sri Lanka, Thailand, Trinidad and Tobago, Ukraine, Uruguay]
b. How many of the countries are in North and Central America and the Caribbean? in South America? in Sub-Saharan Africa? in Asia and the Pacific? in the Middle East and North Africa? in Europe? [5, 4, 2, 7, 0, 22]

Thinking about what you have learned

1. The conditions listed below apply to many people living in developing countries. Consider each condition. If you lived in a developing country and the condition applied to you, would it make you want many children or only a few? Why?

*For highly motivated students and those with greater knowledge of statistics and developing countries.

- You are very poor. You have five brothers and three sisters.
- You have gone through secondary school; so have most of the boys and girls you know.
- Your grandparents had fourteen children; seven lived to be adults. You have five brothers and sisters; four other siblings died.
- The adults around you who have many children are more respected than those who have only a few.
- You have heard radio programs telling parents that if they have fewer children, they can offer those children more opportunities for a better life.
- In your society, people too old to work are cared for by their adult children.

2. Assume that you are the Prime Minister of a developing country in which the population growth rate is 3 percent a year. Your government has adopted a policy of reducing the rate to 2 percent by the end of the century.

Listed below are some activities that will help your country reach that goal. Your government cannot undertake all the activities at once. Choose the five that you would recommend be undertaken first and explain why.

- Encourage parents to send their daughters to school.
- Start a campaign of billboards, radio announcements, and newspaper ads that portray small families as desirable.
- Give a speech on your country's independence day suggesting that your country will be more prosperous and life will be better if population growth slows down.
- Have the Ministry of Health train more people to provide family planning services in rural health clinics and urban hospitals.
- Encourage schools that train doctors, nurses, and paraprofessionals to teach their students how to provide family planning services.
- Ask national heroes in sports and entertainment to support family planning.
- Have the Ministry of Education develop a curriculum for secondary schools about population growth.
- Have the national university do research to determine how to persuade more couples to practice family planning.
- Enact a law that will raise the taxes of couples who have more than three children.
- Enact a law that will lower the taxes of couples who have fewer than three children.
- Have the Department of Industries develop job training programs for women.
- Set up a medical care plan for the elderly.
- Use tax revenue to set up a social security fund so retired people will have a small but secure income.

Supplementary activity

This activity demonstrates how much family size can influence a country's population.

a. Four members of the class are to form two couples. Couple A and their descendants will always have two surviving children; couple B and their descendants will always have three.

b. Couple A is to select two members of the class as its children; couple B is to select three members of the class as its children.

c. The children of couples A and B are to select members of the class as their spouses. The children of couple A and their spouses are couples C and D; the children of couple B and their spouses are couples E, F, and G.

d. Couples C and D are each to select two members of the class as their children. Couples E, F, and G are each to select three members of the class as their children. How many children altogether do couples C and D have? Couples E, F, and G? [Couples C and D=4; E, F, and G=9.]

e. Continue the activity through another generation (the fourth); members of the class already selected will have to be selected again. At the end of the generations, there will be eight children who are descendants of couple A and twenty-seven who are descendants of couple B.

f. What conclusions can you draw from this exercise? [Small changes in the population growth rate can have a large impact on population size.]

Name _____

Date _____

Worksheet 3: Population growth rate

1. Define population growth rate.

2. Do population growth rates tend to be lower in industrial or developing countries? [industrial countries]

3. If the average population growth rate for developing countries was lower in the 1970s than in the 1980s, why were more people added to the population each year? [because the population base was bigger]

4. Why is rapid population growth a problem for developing countries? [because it increases the demand for jobs, food, and housing and for medical, educational, and other social services]

5. What are two things a country can do to help encourage people to have smaller families? [provide family planning services; encourage parents to send their daughters to school; improve the status of women; provide more health and social services]

6. If the death rate is decreasing faster than the birth rate, population will:
   a. increase [x]
   b. decrease
   c. stay the same.

7. In the 1950s and 1960s, death rates in developing countries declined thanks mainly to the spread of modern methods of:
   a. family planning
   b. medicine [x]
   c. education.

8. In the year 2000, nine out of ten people will be in:
   a. industrial countries
   b. developing countries [x]
   c. high-income developing countries.

9. Population growth rates tend to be:
   a. high in countries with low birth rates
   b. low in countries with low death rates
   c. high in countries with high birth rates. [x]

10. What region of the world has the most countries with high population growth rates? What region has the most countries with low population growth rates?
    a. Highest—Asia; lowest—North America
    b. Highest—Sub-Saharan Africa; lowest—Europe [x]
    c. Highest—Europe; lowest—Asia.

GNP per Capita

(pages 8 and 9 in *The Development Data Book*)

Gross national product (GNP) per capita is the dollar value of a country's final output of goods and services in a year, divided by its population. It reflects the value of a country's economic activity and the income of its residents.

- GNP per capita is much lower in developing countries than in industrial countries.
- Developing countries produce one-fourth as many goods and services as industrial countries but have almost six times as many people.
- Between 1980 and 1992, GNP per capita grew at a slower rate in developing countries than in high-income countries.
- Between 1980 and 1992, both population and GNP grew faster in developing countries than in high-income countries.

Understanding the indicator

1. The items listed below would be included in calculating a country's GNP. Which items are goods? Which are services?

- food
- lumber
- housing
- life insurance
- lawyers' fees
- teachers' salaries
- government-sponsored research
- nuclear-powered submarines
- electric power stations
- home computers
- haircuts

2. Calculate GNP per capita for countries A, B, and C, using this formula: GNP ÷ Population = GNP per capita

	GNP	*Population*	*GNP per capita*
Country A	$16,512,000,000	103,200,000	$160
Country B	$316,200,000,000	1,054,000,000	$300
Country C	$1,560,060,000,000	121,500,000	$12,840

Based on your answers, identify each country as low-income, middle-income, or high-income. Country A: low-income; country B: low-income; country C: high-income

Interpreting the map

1. In *The Development Data Book*, countries are grouped both by geographic region and by economic group (based on GNP per capita). Read in Definitions and Notes about the different economic groups (low-income countries, middle-income countries, industrial countries, and high-income developing economies) and study the map and key on pages 8 and 9. Then answer the following questions:

a. According to the map key, what is the highest GNP per capita a country can have to be included among the low-income countries? ($675) Name four low-income countries in Sub-Saharan Africa and four in Asia and the Pacific.

b. Name three middle-income countries in each of the these regions:
   - South America
   - Europe
   - Sub-Saharan Africa
   - Asia and the Pacific
   - Middle East and North Africa

c. Name two industrial countries in North America, four in Europe, and three in Asia and the Pacific.

d. Name three countries shown on the map as high-income developing. Use the Data Table to find the following indicators for these countries: GNP per capita, life expectancy, primary school enrollment, and population growth rate. How are these countries like developing countries? How are they like

industrial countries? Why are these countries not included among industrial or developing countries?

2.* Compare GNP per capita in developing and industrial countries.

a. Study the map and select four countries—your own, one industrial country, one low-income country, and one middle-income country.
b. Refer to column 12 in the Data Table and find the GNP per capita in 1992 for each country you selected.
c. How many times larger is GNP per capita in the industrial country than in the two developing countries? (Divide GNP per capita in the industrial country by GNP per capita in each of the developing countries.)
d. How many times larger or smaller is the GNP per capita in your country than that in the middle-income country?

Understanding Chart 1

1. Study chart 1, which shows, population, GNP, and GNP per capita for high-income and developing countries, and write one or two sentences to summarize the information in the chart about the production of goods and services. [Production of goods and services in developing countries is much less than in high-income countries, and population is much larger; therefore, the per capita share of total production is much smaller.]

2. If a country slows down its population growth rate, is its GNP per capita likely to increase or decrease? Explain your answer. [Increase, because there are fewer people to share the wealth than there would have been at the original rate of population growth.]

3. Listed below are some activities that would help increase economic growth in a low-income country. Assume that you are one of the following:

- an official of the government's Ministry of Planning
- a wealthy citizen who wants to invest his or her money in order to earn more money
- an executive in a private aid foundation in an industrial country

(*Short version*) In the role you have selected, list the activities in the order in which you would undertake them. Disregard the cost of the activities. Explain the order of your list.

(*Long version*) In the role you have selected, assume that you have $2,000,000 to spend in the coming year. What combination of activities would you finance? Explain your choices.

- Build primary schools in fifty villages. (Cost: $2,000,000)
- Resurface and broaden a highway for trucks carrying lumber from the country's largest forest to its only seaport. (Cost: $1,500,000)
- Build, furnish, and equip small primary health care centers in thirty villages. (Cost: $1,800,000)
- Install systems to bring safe water into 200 villages. (Cost: $1,000,000)
- Make funds available to banks so they can make small loans of $2,000 with low interest charges to 500 farmers. (Cost: $1,000,000)
- Build a small factory to make bicycles in the capital city; develop a program to train slum dwellers as workers. (Cost: $1,000,000)
- Equip twenty minibuses to provide health care and family planning services in remote villages; train and pay salaries of bus workers. (Cost: $500,000)
- Train 100 high school graduates to teach in village schools and run adult literacy programs. (Cost: $300,000)
- Train and equip fifty village field workers and pay their salaries for a year; each trainee will teach 100 farmers to use a new kind of seed that will increase production. (Cost: $500,000)
- Make a preliminary survey of possible alternative energy sources as a first step to reducing oil imports. (Cost: $100,000)

Understanding Chart 2

1. Study chart 2, which shows the growth of GNP, population, and GNP per capita in 1980–92. Annual growth rates for GNP per capita are calculated the same way as annual population growth rates. Calculate the GNP per capita growth rate for countries A, B, C, and D using the following formula:

*For highly motivated students and those with greater knowledge of statistics and developing countries.

Change in GNP per capita in a year	÷	GNP per capita at the start of the year	×	100	=	Annual GNP per capita growth rate (%)

	GNP per capita at the start of the year	*GNP per capita at the end of the year*	*Change in GNP per capita during the year*	*Annual GNP per capita growth rate*
Country A	$113	$110	[–$3]	[–2.7%]
Country B	$840	$860	[$20]	[2.4%]
Country C	$1,220	$1,260	[$40]	[3.3%]
Country D	$1,590	$1,700	[$110]	[6.9%]

Average annual growth rates of GNP per capita for a period of years provide a better picture than rates for a single year; they are shown in column 13 of the Data Table. Calculating any growth rate for a period longer than a year requires more complicated mathematical formulas than the one used to calculate an annual rate.

2.* Using the data for 1980–92 in chart 2, complete as much of the table as you can.

	GNP growth rate	*Population growth rate*	*GNP per capita growth rate*
Developing countries	[3.1%]	[1.9%]	[0.9%]
High-income countries	[2.9%]	[0.7%]	[2.3%]

a. Study chart 2 and the table. Compare developing countries and high-income countries.
   - In which group is GNP per capita growing more rapidly? [high-income]
   - In which group is GNP growing more rapidly? [developing]
   - In which group is population growing more rapidly? [developing]

b. Do you agree with the following statement? Why or why not? Raising standards of living in developing countries depends on one thing only: reducing population growth.

*For highly motivated students and those with greater knowledge of statistics and developing countries.

Understanding chart 3

1. Complete the table showing the data in chart 3 on income distribution for three countries.

	Share of income		
	Richest 20%	*Poorest 20%*	*Middle 60%*
Canada	[40.2%]	[5.7%]	[54.1]
India	[41.3%]	[8.8%]	[49.9]
Poland	[36.1%]	[9.2%]	[54.7]

a. In a sentence or two, describe the trend you see in the data regarding the richest and poorest groups in all three countries. [Regardless of whether a country is rich or poor, income distribution is unequal, with the richest people getting much more than the poorest.]

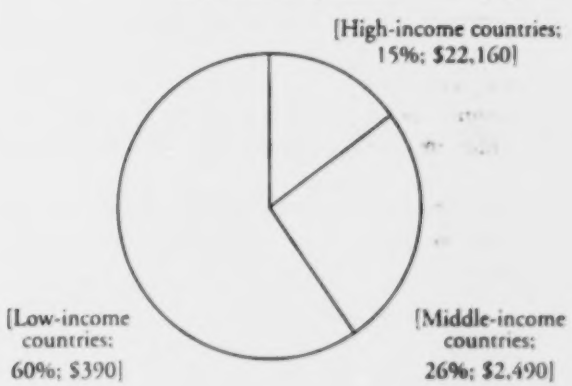
b. Which country has the greatest difference in income distribution between the richest and the poorest? [Canada]

c. In which country does the "middle class" get the largest percentage of income? [Poland]

2. Based on the following population information, label the segments of the pie chart shown below. Within each population segment of the pie chart, write the GNP per capita in 1992 for that group of countries.

	Percentage of total world population, 1992	*GNP per capita 1992*
Low-income countries	60	$390
Middle-income countries	26	$2,490
High-income countries	15	$22,160

Total World Population



3. How many times greater is the average GNP per capita of high-income countries than that of low-income countries? [$22,700 ÷ $390 = 58 times]

Using the Data Table

Refer to column 13 in the Data Table to answer the following questions:

a. In how many countries was the average annual GNP per capita growth rate in 1965–92:
   - less than 1.0 percent [60]
   - 1.0 percent to less than 2.5 percent [27]
   - 2.5 percent to less than 4.0 percent [11]
   - 4.0 percent or more? [10]

b. In how many countries did GNP per capita decline between 1965 and 1992 (that is, those countries with growth rates of less than zero)? [47] In which region are the largest number of countries located? [Sub-Saharan Africa]

c. List the eighteen countries with the highest GNP growth rate. Are there any industrial countries in the group? [Bhutan, Botswana, Chad, Chile, China, Hong Kong, India, Indonesia, Ireland, Japan, Republic of Korea, Malaysia, Mauritius, Oman, Pakistan, Portugal, Singapore, Thailand. Yes: Japan.]

Thinking about what you have learned

[The blank Comparative Data Table at the back of this teaching guide may be copied for classroom use.]

1. Is there a correlation between GNP per capita and other indicators? To answer this question, fill in the Comparative Data Table to compare indicators.

a. Select one country from each of the first three groups of countries as indicated in the map key on page 9 of *The Development Data Book*. (For your high-income country, choose an industrial country, not a high-income developing country.) Select countries from different regions of the world. Write the names of the countries in the column at the left of your Comparative Data Table. Add the name of your own country.

b. Write the following headings for the columns:
   - GNP per capita, 1992
   - Life expectancy at birth, 1992
   - Primary school enrollment, 1992
   - Population growth rate, 1980–92

c. Refer to the Data Table and fill in the columns of your table. If data for one of the indicators are not available, select another country from the same income group and region.

d. Study your table and answer the following questions:
   - In the country with the lowest GNP per capita, are the other indicators high or low?
   - In the middle-income countries, are the other indicators higher or lower than in the low-income country?
   - In the industrial country with the highest GNP per capita, are other indicators higher or lower than in the developing countries?
   - Why is GNP per capita a good general indicator of the standard of living of a country? What aspects of a country's standard of living are not measured by GNP per capita? [It indicates the general wealth of a country. It does not indicate whether wealth is distributed equally or whether people lead fulfilling lives.]

2. The table below gives estimates of the dollar value of GNP for low- and middle-income and high-income countries in 1992.

	GNP	*Population*
Low- and middle-income countries	$4,695,645,000,000	[4,610,000,000]
High-income countries	$18,312,160,000,000	[828,000,000]

a. Complete the table above, using population data for 1992 from chart 3 on page 7 of *The Development Data Book*.

b. Make two pie charts, one showing the value of all goods and services produced (GNP) in both groups of countries, and one showing population in both groups of countries.

c. Divide the class into two groups representing industrial and developing countries. One group should be 15 percent of the class, the other 85 percent. Distribute twenty small objects: sixteen to the smaller group and four to the larger group.

d. Discuss this statement from the perspective of a person in a developing country and a person in an industrial country:

"About 15 percent of the world's people produce about 80 percent of the world's goods and services; the remaining people produce about 20 percent of the world's goods and services."

Supplementary activities

[The following activity requires three transparencies made from the world outline map in the back of this teaching guide, three transparency markers in colors ranging from light to dark, and an overhead projector. The class should be organized into three groups.]

1.* Many important changes accompany economic development in a country. One is that the percentage of people living in urban areas increases. Refer to column 11 in the Data Table and to the note on the urban population in Definitions and Notes.

a. The percentage of people living in urban areas in developing countries went up between 1970 and 1992. What do you think might explain that change? [People wanted the goods and services available in cities; agriculture became more efficient and needed fewer workers; more people were employed in industry; and the amount of industry increased.]

b. Study the data for 1970 in column 11 of the Data Table. Are there any countries in which urban population as a percentage of total population did *not* increase between 1970 and 1992? [Yes; it decreased in Mauritius and stayed the same in Australia, Singapore, and the United Kingdom.]

c. Study the data for 1992 in column 11 of the Data Table. In how many countries was the percentage of urban population relative to total population as follows:
   - 39 percent or less? [42]
   - 40 percent to 70 percent? [42]
   - 71 percent or more? [29]

d. Each classroom group is given a transparency and a marker and is to show on its transparency the countries in one of the percentage groups in step (c) above. The lightest color should be used for countries with 39 percent or less of its population in urban areas, the darkest for countries with 71 percent or more of its population in urban areas. When the transparencies are completed, the teacher should assemble them on an overhead projector.

e. Compare the projected map with the map of GNP per capita on pages 8 and 9 of *The Development Data Book*. What correlation do you see between GNP per capita and the percentage of population in urban areas? [Countries with low GNP per capita tend to have a lower percentage of people in urban areas.]

f. What trend in urbanization might you expect to see as low-income countries develop? [more people moving to the cities]

The following activity requires the same materials as activity 1 above.

2.* An important change that accompanies economic development is that more energy is consumed. Refer to column 15 in the Data Table and read the note in Definitions and Notes about energy use per capita.

a. Energy use per capita increased in most developing countries in the past twenty years. What do you think might explain that increase? [The development of new energy sources; more people have electricity; there are more machines; there is increased construction, transportation, and industry.]

b. Study column 15 in the Data Table. In how many countries in 1992 was energy use per capita the equivalent of:
   - Fewer than 500 kilograms of oil [53]
   - 500 kilograms to fewer than 1,000 kilograms of oil [16]
   - 1,000 kilograms to fewer than 3,000 kilograms of oil [24]
   - 3,000 kilograms of oil or more [27]

c. Repeat step (d) in the preceding activity. The lightest color should be used for countries with energy consumption per capita the equivalent of fewer than 500 kilograms of oil, the darkest color for countries with consumption of 3,000 kilograms of oil or more.

d. Compare the projected map with the map of GNP per capita on pages 8 and 9 of *The Development Data Book*. What correlation do you see between GNP per capita and energy consumption per capita? [Countries with low GNP per capita have low energy consumption.]

e. What trend in energy use per capita might you expect to see as low-income countries develop? [an increase in energy use per capita]

*For highly motivated students and those with greater knowledge of statistics and developing countries.

Name _____

Date _____

Worksheet 4: GNP per capita

1. Define GNP per capita.

2. Calculate the GNP per capita for Kenya in 1992, when that country had a gross national product of $6,884,000,000 and a population of 25,700,000. [$268]

3. Why is GNP per capita a good indicator of a country's development? [It measures the value of a country's economic activity and the income of its people; and it indicates how much money the country has available for health and education services.]

4. What are two aspects of the quality of life in a country that are *not* measured by GNP per capita? [distribution of wealth and personal fulfillment]

5. What are two examples of things people need to help them be more productive in their work? [Good health, more education and training, better tools and machinery, better roads and means of transportation, better communication systems.]

6. GNP per capita in developing countries is:
   a. higher than in industrial countries
   b. lower than in industrial countries [x]
   c. about the same as in industrial countries.

7. A low-income country is most likely to have a GNP per capita of:
   a. $2,500
   b. $250 [x]
   c. $25.

8. Between 1980 and 1992 both population and GNP:
   a. grew faster in industrial countries than in developing countries
   b. grew faster in developing countries than in industrial countries [x]
   c. grew at about the same rate in both developing and industrial countries.

9. Approximately what percentage of the world's population lives in low-income countries?
   a. 25 percent
   b. 60 percent [x]
   c. 75 percent.

10. In many rich and poor countries, the richest 20% of the population tends to earn:
    a. more than 20% of the country's income [x]
    b. about 20% of the country's income
    c. less than 20% of the country's income.

Merchandise Exports

(pages 10 and 11 in *The Development Data Book*)

Merchandise exports are the goods a country produces and sells to other countries; they account for much of a country's overall exports. The money a country earns from these exports helps determine how much it can afford to spend on imports and how much it can borrow abroad.

- The value of merchandise exports from industrial countries is greater than the value of those from developing countries.
- The value of merchandise exports of almost all countries has increased since 1970.
- Manufactured goods, rather than primary goods, make up more of the exports of developing countries than ever before.
- Developing countries pay for what they import mainly by selling their exports to industrial countries.
- Usually a country's pattern of exports—what goods and services are sold outside the country—is based on its comparative advantage, that is, the resources it has that other countries may lack.
- Many developing countries have been able to import more than they export because they borrow money from commercial banks and other institutions.
- Developing countries are trying to strengthen their economies by producing and exporting a wider variety of goods, including more manufactured products.
- The dollar is one of several economically strong currencies that are used as foreign exchange in international trade. These foreign exchange currencies are accepted in almost all countries as a way of paying for imported goods and services. For developing countries to earn the foreign exchange they need to pay for the imports necessary to develop their economies, they must export their own goods and services as much as possible.
- Exports represent only part of all the goods and services produced within a country. Many more goods and services are produced and consumed by the people within the country itself. The sum of these goods and services is measured by a country's gross national product (GNP).

Understanding the indicator

1. Merchandise (or goods) exports account for much of a country's trade. Service exports, such as tourism, account for a smaller portion, although it is growing in many countries. Discuss the following questions:

a. **What are exports?** [the goods and services a country produces and sells to other countries]

b. **What are imports?** [the goods and services a country buys from other countries]

c. **Why do countries trade?** [They export some of their goods and services to earn money, or foreign exchange. They then use some of this money to buy imported goods and services that they need but do not produce themselves or do not have in sufficient quantities.]

d. **What makes trade between countries more complicated than trade within a country?** [Countries have different money systems. They must pay for things they buy from another country with that country's money or with foreign exchange, that is, money often used in international trade, such as U.S. dollars or Japanese yen. They acquire such money mostly—but not entirely—by exporting.]

e. **What happens to trade if the world economy slows down?** [Trade also slows down; countries earn less money from their exports and thus have less money to spend on imports.]

2. Study chart 3 on page 11 of *The Development Data Book*. Then fill in the blanks in the following paragraph:

A country sells some of what it produces to other countries; these are its _____. In return, it receives money from the other countries. It uses some of this money to pay for things it buys from other countries; these are its _____. [Exports, imports]

3. The following are included in a country's total exports, but they are not merchandise exports. What are they?

- A shipping company transports goods for people in other countries.
- One of the country's airlines carries foreign passengers to and from their countries.
- Civil engineers go to a neighboring country to help build a new road.

[They are services supplied to people in other countries.]

4. Countries pay for their imports mostly with the money they make from exports. Sometimes countries import more than they export, and they pay most of the difference by borrowing. With these facts in mind, answer the following questions:

a. If country A exports 100 metric tons of coffee to country B for a profit of $2,000 a ton, how much can it spend on imports? [$200,000]

b. If country A uses all the money it earns from coffee exports to buy twenty trucks from country B at $15,000 each, how much must it borrow to pay for the trucks? [$100,000]

c. To which of the following countries would a commercial bank be more likely to make new loans? Why?
   - Country C regularly exports 500 metric tons of tea. The unit price per ton for this product went from $2,000 last year to $2,500 this year.
   - Country D exported 750 metric tons of cacao last year and 900 metric tons this year. The unit price per ton for this product went from $2,000 last year to $1,500 this year.

   [Country C, because its export earnings, although slightly lower than those of country D last year, are higher this year and increasing. Country D, although it has worked hard and increased its cacao crop, is actually earning less money because prices are falling.]

d. How do a country's exports influence how much it can import and borrow from abroad? [There is a direct relationship. The more a country earns from its exports, the more it can afford to import and the more commercial banks will be willing to lend to it.]

Interpreting the map

1. Study the map and color key for merchandise exports. Then answer the following questions:

a. What colors on the map represents countries with higher values of merchandise exports? Where do these countries tend to be located?

b. What colors on the map represents countries with lower values of merchandise exports? Where do these countries tend to be located?

2. Use the map to answer the following questions. For each country you select, use the Data Table on page 12 of *The Development Data Book* to tell whether the country is a low-income or middle-income country or an industrial country.

a. What are two countries in North and Central America and the Caribbean where the value of merchandise exports is $50 billion or more?

b. What are three countries in Asia and the Pacific where the value of merchandise exports is between $25 billion and $50 billion?

c. What are three countries in South America where the value of merchandise exports is between $1 billion and $25 billion?

d. What are three countries in Sub-Saharan Africa where the value of merchandise exports is less than $1 billion?

Understanding chart 1

1. Study chart 1, which shows the value of exports from developing and industrial countries in 1972, 1980, and 1992. Then read the text around the chart and answer these questions:

a. What happened to the value of merchandise exports in developing and industrial countries from 1972 to 1992? [It increased.]

b. In which group of countries did it increase by the largest dollar amount? [Industrial countries]

c. How many times greater was the value of merchandise exports in 1980 than in 1972 and in 1992 than in 1980:
   - in developing countries? [6.6 times; 1.7 times]
   - in industrial countries? [4.2 times; 2.4 times]

2. Based on your answers to 1(c), which group of countries had the biggest relative improvement in the amount of imports it could buy between 1972 and 1980? [developing; 6.6 times more to spend] between 1980 and 1992? [industrial; 2.4 times more to spend]

3. How can increased exports help increase GNP per capita in developing countries? [When a country sells more exports, it has more money to pay for the imported goods and services it needs to develop its economy; and as the economy grows, GNP per capita increases.]

4. Listed below are some activities that would help to increase economic growth in a low-income country. Consider each activity. Would it require imports? If so, list them.

a. Build ten primary schools, eight in the countryside and two in the capital city.
b. Set up a small shoe factory in the country's largest city and develop a program to train slum dwellers to work in the factory.
c. Resurface and broaden a highway used to carry coffee beans, cacao, and other agricultural products from farms to a seaport from which they can be exported.
d. Build a dam on the country's largest river to increase production of energy and reduce oil imports.
e. Make funds available to banks so they can make small loans with low interest charges to farmers.
f. Equip minibuses with health care equipment and train people as workers on the buses.

Understanding chart 2

1. Study chart 2 about the changing structure of merchandise exports of developing countries and read the text around it. Then answer these questions:

a. Listed below are different goods a country might export. Which ones are primary products and which are manufactured products?
   - wheat [p]
   - bicycles [m]
   - lumber [p]
   - iron ore [p]
   - tractors [m]
   - shoes [m]
   - oil [p]
   - radios [m]
   - uranium [p]
   - diamonds [p]

b. Between 1970 and 1992, what happened to manufactured goods as a proportion of the total exports of developing countries? [The share of manufactured goods increased from about 28 percent to more than 50 percent of the total.]
c. What does this change in the structure of exports tell you about developing countries? [They are more able to make and sell manufactured goods that are competitive on the world market. It also means they should be getting more money for their exports since manufactured goods generally sell for more money than primary goods. Depending on how much they have to spend to repay loans, they may have some income left over to buy more imports.]
d. Is this statement true or false? "Primary goods are generally cheaper to produce but sell for a lower price than manufactured goods." [true]
e. Do industrial countries export agricultural and other primary products? Support your answer. [Yes; for example, the U.S. exports agricultural products.]

2. Read about comparative advantage in Definitions and Notes and refer to the chart 2 text to answer these questions:

a. What is comparative advantage? [The resources a country has that other countries may lack, for example, skilled labor, abundant energy, rich farmland, or favorable government policies; favorable government policies include, for example, laws concerning tax liability, business ownership, and company organization.]
b. How does a country's comparative advantage help producers decide what proportion of their exports will be primary goods and what proportion will be manufactured goods? [It indicates which goods will be cheaper to produce and thus be more competitively priced.]
c. Assume a country has the resources listed in column 1 below. Match these resources with the merchandise exports in column 2 to show how producers in the country might take advantage of their comparative advantage.

Resources	*Merchandise exports*
• iron ore deposits	• wheat [rich farmland]
• cheap labor	• steel [iron ore deposits]
• rich farmland	• inexpensive shoes [cheap labor]

Understanding chart 3

1. Study chart 3 showing the flow of money into and out of developing countries. Notice that, as in bookkeeping, the value of a country's imports and exports must balance. Read the text around the chart; then answer these questions:

a. **What are the two principal ways money flows into a developing country?** [selling exports; receiving loans]
b. **What are the two principal ways money flows out of a developing country?** [buying imports; paying back loans]
c. **Why do many developing countries want to export more manufactured goods?** [The prices of manufactured goods tend to be higher and more stable than prices for primary products.]
d. **Why can it be difficult for developing countries to produce and export more manufactured products?** [These countries may lack the resources needed to train workers, buy equipment, and build factories, and other critical support.]

2.* **The data in the following table show where the money for foreign trade came from and how it was spent in country A in 1986 and 1992. The expression "1992 U.S. dollars" means that all data are expressed in amounts based on the purchasing power of the U.S. dollar in 1992, so they are comparable.**

Where the money came from, country A, 1986 and 1992 (1992 U.S. dollars)

	1986	*1992*
Receipts from exports[a]	10,000,000,000	26,300,000,000
New loans[b]	11,000,000,000	4,700,000,000
Other receipts[c]	300,000,000	9,900,000,000
Total receipts	[$21,300,000,000]	[$40,900,000,000]

How the money was spent, country A, 1986 and 1992 (1992 U.S. dollars)

	1986	*1992*
Payments for imports[d]	17,000,000,000	30,200,000,000
Payments on earlier loans[d]	4,300,000,000	10,700,000,000
Other payments[e]	0	0
Total payments	[$21,300,000,000]	[$40,900,000,000]

a. The data presented here represent a middle-income country.
b. These loans were mainly from commercial banks.
c. Receipts from other sources include salaries earned by citizens working outside country A and money received by plants set up in the country by foreign companies.
d. Includes principal and interest.
e. Other payments include money that citizens invest overseas.

---

*For highly motivated students and those with greater knowledge of statistics and developing countries.

a. **Calculate total receipts and payments for country A in 1986 and 1992. How many times greater were the amounts in 1992 than in 1986?** [Almost double]
b. **What percentage of country A's total income came from exports in 1986? in 1992? (Divide exports by total income. Convert the decimal to a percentage by multiplying by 100; round to the nearest percentage.)** [47%; 63%]
c. **What percentage of country A's total payments went to repay earlier loans in 1986? in 1992?** [20%; 26%]
d. **Was country A better able to speed up economic development by importing goods and services in 1986 or 1992?** [1986] **Why?** [Because, although country A earned more from exports in 1992, it had to use the money to pay back loans instead of to buy more of the imports that would have helped its economy to grow.]

3.* **The table below shows the amounts of principal and interest that country A and country B paid back on loans in 1980, 1986, and 1992 and total payments for the same years.**

Principal and interest paid by country A and country B, 1980, 1986, and 1992 (1992 U.S. dollars)

	Payments on earlier loans (1)	*Total payments (2)*	*(1) as a % of (2)*
Country A			
1980	$1,761,000,000	$12,748,000,000	[14]
1986	$15,287,000,000	$54,242,000,000	[28]
1992	$10,581,000,000	$40,811,000,000	[26]
Country B			
1980	$16,000,000	$354,000,000	[5]
1986	$89,000,000	$572,000,000	[16]
1992	$108,000,000	$975,000,000	[23]

a. **Calculate each country's percentage of total payments that went toward loan payments in 1980, 1986, and 1992. (Divide payments on earlier loans by total payments; convert the decimal to a percentage by multiplying by 100; round to the nearest percentage.) Write your answers in the table.**
b. **What happened to that percentage between 1980 and 1992 in both countries?** [In country A, by 1986 it had doubled; by 1992 it had improved only slightly. In country B, by 1986 it had more than tripled; by 1992 it had increased almost fivefold.]

c. Look again at the part of chart 3 that shows how the money for foreign trade is spent. If more of the money goes for payments on earlier loans, what happens to the amount that can be spent on imports? [The amount must be reduced.]

d. Based on the information above, which of the two countries is more likely to be able to afford to improve the living conditions of its people? [country A]

Using the Data Table

1. The data in the following table will show how the value of merchandise exports can vary between low-income and middle-income countries.

Value of merchandise exports

	Low-income countries	*Middle-income countries*
Less than $1 billion	[24]	[15]
$1 billion–$25 billion	[10]	[36]
$25 billion–$50 billion	[0]	[6]
More than $50 billion	[0]	[1]
Data not available	[13]	[18]

a. Look at column 16 in the Data Table and the symbols at the left of the table that indicate the income group each country belongs to. Add up the total number of countries that fit into each category in the table above.

b. Make a general statement that compares the value of merchandise exports of low-income countries with that of middle-income countries. [The value of merchandise exports tends to be higher in middle-income countries than in low-income countries.]

2. Read in Definitions and Notes about debt and total external debt as a percentage of GNP. Refer to column 17 in the Data Table and do the following:

a. Between 1986 and 1992, how many countries showed an increase in their public debt as a percentage of their GNP? [29] How many showed a decrease? [50] Based on the data, would you say the debt situation in general is improving or getting worse? [improving]

b. In 1992, which country in each of the six geographical regions had the highest debt as a percentage of GNP? [Nicaragua—750%; Ecuador—100%; Bulgaria—125%; Jordan—163%; Mozambique—495%; Papua New Guinea—87%]

c. In 1992, which country in each of the six geographical regions had the lowest debt as a percentage of GNP? [Guatemala—24%; Paraguay—25%; Romania—14%; Iran, Islamic Republic—13%; Botswana—13%; Myanmar—10%]

d. What effect do you think an improvement of the debt situation might have on a developing country? [It might help speed up economic development, increase the amount of money available to buy goods and services, make it easier to get additional loans, improve standards of living, and improve the quality of life.]

Thinking about what you have learned

1. Industrial countries rely on people in developing countries to buy many of their exports. When developing countries cannot afford to import goods, people in industrial countries lose income and even jobs.

a. The table on the following page shows what percentage of manufactured goods from four industrial countries is purchased by people in developing countries. What is the dollar value of these exports to developing countries? (Divide the percentage by 100 to get a decimal, then multiply by the total value of manufactured exports.)

b. Which of the four countries sells the largest percentage of its manufactured exports to developing countries? [Country A]

c. Assume that the countries in the table increased their exports to developing countries and exported the same amount or increased their exports to their other trading partners. What would be the effect on employment and on the production of goods and services in the countries in the table? [Both would increase.]

d. What would be the effect on developing countries if the industrial countries with whom they trade:
   - limited the number of imports from developing countries that could come into the country? (This is called putting a quota on imports.)
   - added a tax (or tariff) to these imports so that they were more expensive to buy?
   - bought more of these imports?

   [Quotas and tariffs would reduce the amount of goods from developing countries and thus developing countries would lose income. Buying more would increase income for developing countries and thus help them develop their economies.]

e. What would be the effect on the industrial countries if developing countries could not afford to buy manufactured exports? [Income and jobs in industrial countries would decrease.]

	Total value of manufactured exports, 1992	*Percentage of manufactured exports to developing countries*	*Value of manufactured exports to developing countries*
Country A	$ 4,977,000,000	51	[$ 2,538,000,000]
Country B	$ 57,724,000,000	6	[$ 3,463,000,000]
Country C	$ 81,266,000,000	22	[$17,879,000,000]
Country D	$165,153,000,000	35	[$57,804,000,000]

2. As you have read in the text and seen in the data, in recent years countries have begun trading more, and the debt situation has improved in many developing countries. But for many other developing countries, better debt remains a serious problem. To understand debt and what must be done to deal with it, study the table below and answer the questions.

Debt in developing countries
(millions of 1992 U.S. dollars)

	1980	*1986*	*1992*
Debt	$658,148	$1,217,623	$1,662,173
Receipts from exports	739,093	603,626	952,898
Payments on earlier loans			
Principal	(46,172)	(82,674)	(104,057)
Interest	(53,292)	(73,853)	(74,438)
TOTAL	[$99,464]	[$156,527]	[$178,495]

a. Compare the 1986 amounts for debt and exports with the 1980 amount.
- Did developing country debt increase or decrease? [increase] By how many times? [1.9]
- Did receipts from exports increase or decrease? [decrease] By what percentage? [18%]
- Did exports keep up with debt from 1980 to 1986? Why is this important? [no; because it shows that developing countries were more in debt and had less money with which to repay their loans and to buy the imports they needed to help develop their economies.]

b. Compare the 1992 amounts for debt and exports with the 1986 amount.
- Did developing country debt increase or decrease? [increase] By how many times? [1.4]
- Did receipts from exports increase or decrease? [increase] By how many times? [1.6]
- Did exports keep up with debt from 1986 to 1992? Why is this important? [not quite; because it shows that the situation in developing countries is improving, although these countries still did not have all the money they needed to repay their loans and to buy critical imports.]

c. Compare total payments on earlier loans.
- Calculate total payments in each year by adding principal and interest.
- How many times greater were total payments in 1986 than 1980? [1.6]
- How many times greater were total payments in 1992 than 1986? [1.1]
- Is the situation getting better or worse? [better] Is there still a problem? Explain. What effect did this situation have on the ability of developing countries to import? [The amount of money available to buy imports was reduced.]

d. Compare the percentages of total payments on earlier loans that went for principal and interest.
- What percentage of payments went for principal in each year? for interest in each year? [principal: 1980—46%; 1986—53%; 1992—58%; interest: 1980—54%; 1986—47%; 1992—42%]
- What effect would increased interest rates have on economic development? [A smaller amount of money would be available for importing goods and services.]

e. What is the effect on the debt of developing countries if the growth of world trade slows down? speeds up? [With a slowdown in world trade, exports fall, and the ability to import and to repay loans declines; with a speedup in world trade, exports increase, and the ability to import and to repay loans increases.]

Supplementary activities

1. Use the data in the table on the opposite page to make line graphs showing the exports and imports in country A and country B in 1984–92. Make one graph for each country. For both countries mark the years on the horizontal scale. For country A, make a vertical scale in which each interval is $2 billion, starting with $16 billion, then $18 billion, and so forth to $42 billion. For country B, make a vertical scale in which each interval is $50 million, start-

ing with $200 million, then $250 million, and so forth to $600 million. Show exports as a solid line and imports as a line of dashes.

Exports and imports, country A and country B, 1984–92 (millions of 1992 U.S. dollars)

	Country A		*Country B*	
	Exports	*Imports*	*Exports*	*Imports*
1984	$17,350	$25,873	$284	$491
1985	$19,434	30,755	296	569
1986	$23,275	36,250	334	608
1987	$26,923	38,873	330	485
1988	$23,469	39,773	268	412
1989	$24,341	31,286	255	412
1990	$30,205	30,334	341	366
1991	$29,309	29,737	282	388
1992	$25,300	30,230	270	367

a. What is the relationship between exports and imports in both countries in the period the graphs show? [Imports were greater than exports.]
b. What happened to exports and imports in country A and country B in the early 1990s? [In country A, exports fell and imports rose less rapidly; in country B, exports and imports fell.]

2. Most of the cost of economic development is met by the people of developing countries: from their taxes, their savings, their exports, and loans from their banks. But grants and loans—from commercial and investment banks, private organizations, international institutions, and the foreign aid agencies of the governments of other countries—speed economic development. Mainly, they provide money for imports and expert advice. For the poorest countries, financial assistance is essential for standards of living to rise.

Study the table showing the financial assistance that twenty-six countries provided to developing countries in 1991, either directly through their foreign aid agencies or indirectly through international institutions. Do the following:

a. Rank the countries by the dollar amount of their aid and by the percentage of GNP their aid represented. Which six countries gave the largest dollar amount of aid? Which six gave the least?
b. Which six countries gave the largest amount of aid based on the percentage of GNP? Which six gave the least?
c. If your country is listed, where does it rank? What other countries have a similar rank?

Financial aid, selected countries, 1991

	GNP per capita (1991)	*Aid 1991 (millions)*	*Aid as a percentage of GNP*
Algeria	1,980	5	0.01
Austria	20,140	548	0.34
Australia	17,050	1,050	0.38
Belgium	18,950	831	0.42
Canada	20,440	2,604	0.45
Denmark	23,700	1,200	0.96
Finland	23,980	930	0.76
France	20,380	7,484	0.62
Germany	23,650	6,890	0.41
Iran, Islamic Rep.	2,170	2	...
Ireland	11,120	72	0.19
Italy	18,520	3,352	0.30
Japan	26,930	10,952	0.32
Kuwait	13,890	387	...
Libya	...	25	0.09
Netherlands	18,780	2,517	0.88
New Zealand	12,350	100	0.25
Nigeria	340	13	0.06
Norway	24,220	1,178	1.14
Saudi Arabia	7,820	1,704	1.44
Switzerland	33,610	863	0.36
Sweden	25,110	2,116	0.92
United Arab Emirates	20,140	558	1.66
United Kingdom	16,550	3,248	0.32
United States	22,240	11,262	0.20
Venezuela	2,730	15	0.03

... Data not available.

3.* Study the table on the following page.

a. Which two of these four countries had the highest GNP per capita in 1992? Do these two countries export more manufactured goods or more primary goods? [Argentina, Korea. Argentina, primary; Korea, manufactured]
b. Calculate the percentage increase in GNP per capita from 1970 to 1992 in each country. (Subtract the 1970 amount from the 1992 amount and divide the result by the 1970 amount.) Write your answers in the table.

*For highly motivated students and those with greater knowledge of statistics and developing countries.

c. In which country did GNP per capita show the greatest percentage increase? the next greatest increase? Do these two countries export more manufactured goods or primary goods? [Argentina, Korea; Argentina, primary; Korea, manufactured goods]

d. Which two of these four countries had the lowest GNP per capita in 1992? Do these two countries export more manufactured goods or primary goods? [Côte d'Ivoire, Pakistan; Côte d'Ivoire, primary; Pakistan, manufactured]

e. Taking into account all the information in the table, which country do you think has made the most economic progress? Why? [Korea. Its GNP per capita is the highest and has grown the most.]

f. Use the Data Table, your library, and other resources to find out as much as you can about each of the four countries in the table to the right. What are the climate, location, geographic features, and natural resources of each country? What products does it export? What kind of government does it have? Do its citizens have the chance to go to school? Do they elect their government leaders? Do they have enough to eat? How accessible are hospitals and clinics? Based on what you learn, discuss some of the factors that may influence whether a country exports more primary or more manufactured goods.

	Ratio of primary to manufactured merchandise exports (percent)		*GNP per capita*		*Change + or − (percent)*
	1970	*1992*	*1970*	*1992*	
Argentina	86/14	73/27	$1,240	$6,050	[+388]
Côte d'Ivoire	86/14	89/11	$270	$670	[+148]
Korea, Rep. of	24/76	7/93	$270	$6,790	[+2,415]
Pakistan	43/57	21/79	$170	$ 420	[+147]

Name _____

Date _____

Worksheet 5: Merchandise exports

1. What are merchandise exports?

2. Why do countries want to export their products? [to earn money—or foreign exchange—to buy imports and pay back loans]

3. Is the value of merchandise exports in developing countries generally greater or lesser than in industrial countries? [lesser]

4. List three examples of primary products. [oil, wheat, iron ore, coffee, lumber, for example]

5. In the past several decades the exports of developing countries have:
   a. maintained about the same shares of primary and manufactured goods
   b. changed so that primary goods are now a larger share of exports
   c. changed so that manufactured goods are now a larger share of exports. [x]

6. A country has a comparative advantage when it can:
   a. have first choice at buying another country's exports
   b. buy a product at a cheaper price than any other country
   c. sell a product at a cheaper price than any other country. [x]

7. In general, does more of the money flowing into developing countries come from selling exports or from getting new loans? [selling exports]

8. To increase its economic security, a country wants to:
   a. borrow more money and import fewer products
   b. produce and export a wider variety of manufactured goods [x]
   c. produce and export a few basic agricultural products.

9. Since 1972 the total value of exports has:
   a. increased in both developing and industrial countries [x]
   b. increased in industrial countries and decreased in developing countries
   c. increased in developing countries and decreased in industrial countries.

10. Which statement is NOT true?
    a. If a country spends its export earnings on paying back old loans instead of buying essential imports, its economy grows very rapidly. [x]
    b. If a country exports products whose prices have fallen compared with other products, it may have less money to spend on essential imports.
    c. If a country exports more products at higher prices, it can afford both to pay back its old loans and to import more goods.

Culminating Activities

[These activities allow students to synthesize and evaluate the knowledge and understanding they have acquired.]

Questions for discussion

1. There are many reasons for the differences in standards of living in industrial and developing countries. The reasons fall into at least the five categories listed below. What other reasons can you think of? Into which category do they fit? Can you think of other categories?

- technology
- history
- culture
- natural resources
- social and political institutions

2. Energy consumption increases with economic development. Today, industrial countries, on average, consume many times more energy than developing countries. How might these facts affect economic growth in the future? What steps might be taken to maintain economic growth and to protect and increase energy sources at the same time?

3. Developing industry is a step toward raising standards of living in developing countries. But modern industry can cause pollution and the wasteful use of scarce natural resources. What steps can be taken to raise standards of living and protect the environment at the same time?

4. Many observers say that of all the regions where developing countries are located, Sub-Saharan Africa faces the gravest problems.

a. What statistics support this view?

b. What do you know about each of the following that helps to explain the conditions in Sub-Saharan Africa?

- its history
- its social and political organization
- geographic factors
- diseases
- climate

5. If standards of living in developing countries remain the same or decline, what do you think is likely to happen in those countries? in the world?

6. Economic development brings many changes to a developing country, and people must adapt to these changes.

- In what ways is a country's culture weakened by economic development? In what ways is it strengthened?
- Do you think the overall effect of development is to make life better or worse? or better in some ways and worse in others? Give reasons for your answers.

7. Many factors—within developing countries and outside them—influence economic development. Consider the factors below and explain what their effect might be on the development program of a developing country.

- public demand to import luxury goods
- a large increase in the price of fuel oil
- the threat of invasion from a neighboring state
- a natural catastrophe, such as crop failure or earthquake
- increased use of synthetic materials (plastic, synthetic rubber, nylon, etc.) in place of natural materials
- a sharp increase in interest rates on loans to developing countries
- high import tariffs in industrial countries on goods from developing countries
- corruption in the government
- a leader who favors some groups in the country and discriminates against others
- a weakening of the commitment of a country's leaders to economic development
- the strength of a political party that opposes the party in power

8. Study the photographs on the cover of *The Development Data Book*. The people in these photographs all live in developing countries. What are some of the ways in which the work they are doing contributes to the economic and social development of their countries?

9. Do you agree or disagree with the following statement? Give reasons for your answer.

"Economic growth is the most important measure of a country's development."

Questions about values

1. Discuss these questions:

a. What do teenagers in your country value the most? List eight or ten things on which most members of the class agree.

b. List five things a teenager in a village in a low-income country might value.

c. List five things a teenager living in a city in a middle-income country might value.

d. What do your lists suggest about the values of teenagers throughout the world?

2. Listed below are some feelings arranged in pairs. The line between each pair represents a continuum.

a. Circle the number on each continuum that represents the feelings you think teenagers in your country have when they think about living conditions in developing countries.

anger ..... 1…2…3…4…5 ..... apathy
fear ..... 1…2…3…4…5 ..... security
guilt ..... 1…2…3…4…5 ..... no guilt
ignorance ... 1…2…3…4…5 ..... knowledge
despair ..... 1…2…3…4…5 ..... hope
boredom .... 1…2…3…4…5 ..... curiosity

b. Why do you think teenagers have these feelings about developing countries?

c. What do you think teenagers should do about their feelings?

Research activity

Design development activities or draw up a development plan for a developing country.

1. Select a developing country; describe conditions in that country using at least eight indicators from *The Development Data Book*'s Data Table.

2. Do library research to acquire additional information about the country:

- its geographic features
- its natural resources
- its exports and imports
- the distribution of its population
- its relationship with its neighbors
- its social and political organization
- other information that might be relevant to its economic development

3. Listed here are some policies developing countries use to advance their economic development. Study the list and rank the policies in the order you think is appropriate for the country you have selected. Write number 1 (most appropriate) through 7 (least appropriate) on the line to the left of the policy.

_____Improve and extend the physical facilities that underlie economic growth—roads, ports, electric power, telephone and radio systems, transport systems._____

_____Increase agricultural output to provide more food and to increase the income of farm families._____

_____Expand industry to provide jobs and to produce goods needed for domestic consumption and for export._____

_____Develop export products to earn money for goods and services that cannot be produced in the country but are essential for economic development._____

_____Develop human resources by providing greater educational opportunity and better health services._____

_____Assist the poorest people in meeting their basic needs—for food, health care, education, safe water, and jobs._____

_____Slow population growth._____

4. Decide the percentage of the resources available for economic development that you will allocate to each of the policies listed in activity 3. Your total allocation must be 100 percent, but you need not allocate resources to all policies. Write the percentage on the line that follows the policy statement.

5. Taking into account your knowledge of the country and the priorities you have established, do one of the following:

- Design a development activity or set of activities that advances one of the policies.
- Draw up a five-year development plan for the country that takes all policies into account.

Topics for debate

1. Resolved: That industrial countries should assist developing countries in raising their standards of living.

2. Resolved: That economic growth in developing countries is a threat to industrial countries.

3. Resolved: That industrial countries should solve poverty at home before they try to help solve poverty in developing countries.

4. Resolved: That the problems facing developing countries today are greater than those they faced in the past.

Name _____

Date _____

Test: The Development Data Book

[This test measures the achievement of the minimum objectives listed in the introduction to this teaching guide.]

Part One

Indicate the country group—or groups—for which each of the following statistics could be characteristic. Write the appropriate letter (or letters) in the space at the left of the statistic:

L—low-income country
M—middle-income country
I—industrial country

1. Infant mortality rate
   [M] _____ 70 per 1,000 live births
   [L] _____ 132 per 1,000 live births

2. Life expectancy at birth
   [I] _____ 75 years
   [L] _____ 48 years

3. Primary school enrollment
   [L] _____ 70 percent
   [M] _____ 99 percent

4. GNP per capita
   [L] _____ $250
   [M] _____ $1,270

5. GNP per capita growth rate
   [I,M] _____ 2.5 percent
   [L] _____ –0.2 percent

6. Value of merchandise exports
   [L] _____ $500,000,000
   [I] _____ $80,000,000,000

7. Population growth rate
   [L,M] _____ 2.3 percent
   [I] _____ 0.5 percent

8. Population per physician
   [L] _____ 17,000
   [I] _____ 500

Part Two

Circle the letter preceding the phrase that correctly completes the sentences below.

1. Life expectancy at birth is higher in developing countries now than in 1960 because:
   a. health care is improving
   b. more infants are surviving
   c. more people have access to safe water
   d. all of the above. [x]

2. Primary school enrollment is increasing in developing countries because:
   a. more children are attending school
   b. more money is being spent on schools, teacher training, and textbooks
   c. governments are encouraging parents to send their children to school
   d. all of the above.

3. Population growth rates are high in developing countries because:
   a. birth rates are low
   b. death rates are going up
   c. parents continue to have many children [x]
   d. all of the above.

4. GNP per capita is increasing in most developing countries because:
   a. the production of goods and services is increasing faster than population.
   b. population growth is slowing down
   c. more goods and services are available
   d. all of the above. [x]

5. When a developing country produces more exports, it can:
   a. import more goods and services
   b. borrow more money from abroad
   c. make payments on loans
   d. all of the above. [x]

6. Low-income countries today tend to have:
   a. rapidly increasing population, a high secondary school enrollment rate, high GNP per capita
   b. declining death rates, declining infant mortality, GNP per capita of $425 or less [x]
   c. high life expectancy at birth, increasing primary school enrollment, merchandise exports of more than $1,000,000,000
   d. all of the above.

Part Three

Pablo is a teenage boy, and Sita is a teenage girl. Both live in small villages in low-income developing countries. Assume that their lives are typical of teenagers' lives in low-income developing countries. Write an essay in which you:

- Describe at least three *ways* in which Pablo's or Sita's life is different from yours.
- Give at least three *reasons* why his or her life is different from yours.

Part Four

The table below gives statistics for two countries.

	Country A	*Country B*
1. Population	6,300,000	48,000,000
2. Life expectancy at birth	44 years	63 years
3. Infant mortality rate per 1,000 live births	208	53
4. Population per physician	48,510	7,180
5. Primary school enrollment rate	19%	96%
6. Average annual population growth rate	2.0%	2.8%
7. GNP per capita	$240	$770
8. Average annual GNP per capita growth rate	1.1%	4.6%
9. Percentage of labor force in agriculture	82%	76%
10. Value of merchandise exports	$75,000,000	$10,000,000,000

Answer the questions below by choosing country A or country B. Also fill in the number (or numbers) from 1 to 10 to indicate the statistic (or statistics) above that support your choice. In some cases, more than one type of statistic will be needed.

1. Which country has the larger number of farmers?
   Country _____ [B] Statistic(s) _____ [1,9]
2. In which country will population increase more rapidly if present trends continue?
   Country _____ [B] Statistic(s) _____ [6]
3. In which country are school-age children less likely to be enrolled in primary school?
   Country _____ [A] Statistic(s) _____ [5]
4. In which country are there more infant deaths?
   Country _____ [B] Statistic(s) _____ [1,3]
5. In which country are the goods and services available each year increasing less quickly?
   Country _____ [A] Statistic(s) _____ [8]
6. Which country sells fewer goods to other countries?
   Country _____ [A] Statistic(s) _____ [10]
7. Which country will have fewer people with skills in the future if present trends continue?
   Country _____ [A] Statistic (s) _____ [1,5]
8. In which country is health care better?
   Country _____ [B] Statistic(s) _____ [2,3,4]
9. In which country will the number of people added to the population each year be lesser if present trends continue?
   Country _____ [A] Statistic(s) _____ [1,6]

Part Five

Do you think that living conditions in developing countries have improved since 1960, or worsened, or both? Express your opinion and use statistics to support it.

Grading the test

There are forty responses in Parts One, Two, and Four; each response is worth one point. The essays in Parts Three and Five are worth thirty points each.

A good essay in Part Three would note differences such as an agricultural lifestyle, lack of goods and services, poor health, large family size, and lack of schooling. Reasons for differences would include low levels of income, lack of industrialization, rapid population growth, few schools, poor nutrition and health care, unsafe water, lack of sanitation, the need to work to help support the family, and the need for large families as a kind of social security.

A good essay in Part Five would note improvement in some areas and worsening in others. It would note increases in health care, education, and the production of goods and services (references would be to decreases in infant mortality and increases in life expectancy, school enrollment, and GNP per capita). It would mention rapid population growth as a serious problem that slows down the rise of GNP per capita in many countries (reference would be to population growth rates). It would note increasing exports (reference would be to merchandise exports) and the production of more manufactured goods. It would point out the effects on trade and purchasing power of higher interest rates and large debt burdens. It would also compare conditions and progress made in Africa, Asia and the Pacific, and Central and South America.

© 1995 The International Bank for Reconstruction and Development/The World Bank, Washington, D.C., 20433, U.S.A.

The Development Data Book Teaching Guide
© 1995 The International Bank for Reconstruction and Development/The World Bank, Washington, D.C., 20433, U.S.A.

The Development Data Book Teaching Guide
© 1995 The International Bank for Reconstruction and Development/The World Bank, Washington, D.C., 20455, U.S.A.

The Development Data Book Teaching Guide
© 1995 The International Bank for Reconstruction and Development/The World Bank, Washington, D.C., 20433, U.S.A.

The Development Data Book Teaching Guide
© 1995 The International Bank for Reconstruction and Development/The World Bank, Washington, D.C., 20433, U.S.A.

The Development Data Book Teaching Guide
© 1995 The International Bank for Reconstruction and Development/The World Bank, Washington, D.C., 20433, U.S.A.

Comparative Data Table

	(1)	(2)	(3)	(4)	(5)	(6)	(7)

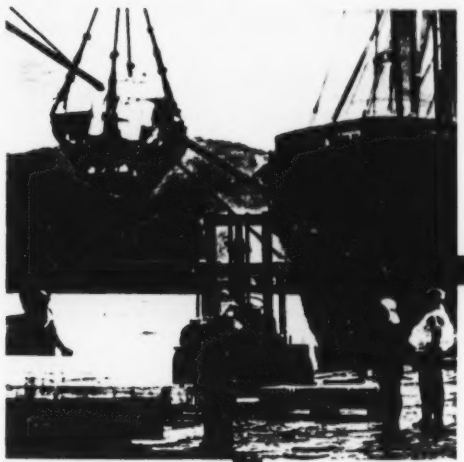
The Development Data Book Teaching Guide
© 1995 The International Bank for Reconstruction
and Development/The World Bank
Washington, D.C. 20433, U.S.A.

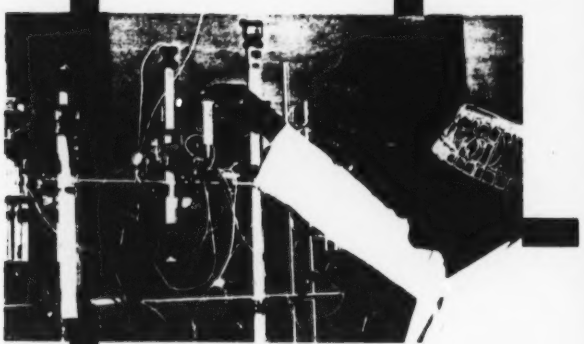
78

What is the World Bank?

The World Bank, founded in 1944, is an international cooperative owned by the governments of more than 175 countries. Its goal is to reduce poverty and improve living standards by promoting sustainable growth and investments in people. To achieve this goal, the Bank lends money to its low- and middle-income member countries for development projects and provides technical assistance and policy guidance. For example, World Bank loans help countries supply people with safe drinking water; build schools and train teachers; increase agricultural productivity; manage forests and other natural resources; build and maintain roads and railways; reduce air pollution and other environmental problems; enlarge telecommunications networks; generate and distribute energy; expand health care, especially for women and children; and modernize industries. The World Bank also serves as a catalyst to stimulate investment and lending by others. World Bank loans to middle-income member countries have longer repayment periods and generally lower interest rates than commercial bank loans. World Bank loans to low-income member countries are interest-free and have even longer repayment periods. The World Bank lends about $20 billion a year to developing countries.

The World Bank
Washington, D.C.





ISBN 0-8213-3100-0